

International Series.

THE

106040

AMERICAN

Journal of Education.

PUBLISHED QUARTERLY.

EDITED BY •

HENRY BARNARD, LL. D.

VOLUME SIX.

ENTIRE SERIES.—VOLUME XXXI.

HARTFORD:

HENRY BARNARD.

1881.

THE JOURNAL OF EDUCATION

THE

AMERICAN

Journal of Education

THE JOURNAL OF EDUCATION

THE JOURNAL OF EDUCATION

THE JOURNAL OF EDUCATION

THE JOURNAL OF EDUCATION

THE JOURNAL OF EDUCATION

THE JOURNAL OF EDUCATION

THE JOURNAL OF EDUCATION

PREFATORY NOTE.

The publication of the International Series of the American Journal of Education will be continued during the present and probably several succeeding years, with special reference to embodying biographical, historical, and bibliographical papers of permanent value. Probably in each year one number will not be issued in its direct sequence, the space being left to include, before completing Index to the volume, educational documents at the time not available or ready for publication. Friendly criticism on omissions, or errors of statement in the historical and biographical papers, is solicited.

MARCH 1, 1881.

HENRY BARNARD,
28 Main Street, Hartford, Conn.

BARNARD'S JOURNAL OF EDUCATION—INTERNATIONAL SERIES

Contents for March—1881.

Portrait of DEXTER A. HAWKINS.....	129
I. THE AMERICAN JOURNAL OF EDUCATION.....	1
Prospect and Retrospect—Index.....	v
II. BRUSSELS INTERNATIONAL CONGRESS OF EDUCATION.....	1-8
Summary of Proceedings.....	2
III. EARLIEST CONTRIBUTION TO NEW ENGLAND PEDAGOGY.....	9-48
Sermon by President Chauncy of Harvard College, in 1686.....	9
God's Mercies in a Faithful Ministry, and its Perpetuation.....	9
IV. STUDIES IN PESTALOZZIANISM.....	49-81
1. Froebel's Letter to Princess Sophia of Rudolstadt.....	49
2. List of 300 Publications on Pestalozzi and his system.....	69
3. Contents of Revised Edition of Barnard's Pestalozzi.....	81
V. THE KINDERGARTEN AND ITS FOUNDER.....	82-126
1. Genesis—Aims and Methods as inaugurated by Froebel.....	82
2. Critical Moments in Froebel's Institutions. By Barop.....	97
3. Official Report on the Institution at Kellban. By Commissioner Zahn.....	106
4. Unity of Life—The Ideal and Actual. By Dr. W. Lange.....	111
5. Dissemination of System—Interdict of Prussian Minister.....	116
6. Last Days—Reminiscences of Middendorff and Marenholtz.....	117
7. Contents of Collected Writings—Proposed Publication.....	125
8. Publications relating to Froebel and his System.....	127
VI. AMERICAN EDUCATIONAL BIOGRAPHY, <i>Continued</i>	129-144
1. DEXTER A. HAWKINS, AND UNOFFICIAL PUBLIC SERVICE.....	129
Memor with Portrait.....	129
Work in Teacher's Institutes—Compulsory School Attendance.....	133
2. CALEB MILES, AND INDIANA PUBLIC SCHOOLS.....	135
Memor with Portrait.....	135
Messages of "One of the People" to the Legislature of Indiana.....	137
VII. BERTHA V. MARENHOLTZ-DULOW.....	145-160
1. Personal Labors for the Establishment of the Kindergarten.....	145
2. Publications for the Elucidation of Froebel's Idea.....	159
VIII. HISTORICAL DEVELOPMENT OF FEMALE EDUCATION.....	161-166
1. NOTES ON THE EDUCATION OF GIRLS IN CONNECTICUT PRIOR TO 1800.....	161
Common Schools—Apprenticeship—Private Tuition by Clergymen.....	161
Examples of Educated Women and Educating Mothers.....	165
IX. MODEL SCHOOL OF EDUCATIONAL LEAGUE IN BRUSSELS.....	169-176
Paper read before the Education Society of London.....	169
X. INTUITION AND INTUITIONAL TEACHING.....	177-190
Philosophy of Methods in Brussels Model School. By the Director.....	177
Paper submitted to International Congress of Education.....	177
XI. FRENCH PEDAGOGY AND SCHOOLS.....	191-192
Contents of Proposed Publication on International Pedagogy.....	191
XII. UNIVERSITY RECOGNITION OF PEDAGOGICS.....	193-196
Cambridge Syndicate—First Public Examination in 1880.....	193
Chairs of Pedagogy in German Universities.....	198
XIII. FROEBEL'S PRINCIPLES IN ALL NORMAL TRAINING.....	197-200
1. Experience in New York Normal College.....	197
XIV. RIGHT BEGINNINGS WITH NEGLECTED CHILDREN.....	201-208
1. Free Kindergarten and Workingman's School in New York City—F. Adler, 201	
2. Kindergartners for Neglected Children in San Francisco—Mrs. S. B. Cooper, 206	
XV. ANALOGIES OF TONE AND COLOR.....	209-221
Use of Colors in Teaching Musical Notation—D. Bachellor.....	209
XVI. KINDERGARTEN AND INFANT SCHOOLS.....	222-224
Efforts to Merge—London School Board.....	222

BARNARD'S JOURNAL OF EDUCATION—INTERNATIONAL SERIES.

Contents for July—1881.

Portrait of Prof. Caleb Mills.....	225
I. COMMON SCHOOLS IN STATES WASTED BY WAR.....	226-240
II. THE AMERICAN COLLEGE AND UNIVERSITY.....	241
III. UNIVERSITY GROWTH OF COLUMBIA COLLEGE, 1867-1881.....	247-268
IV. SWISS SCHOOLS AND EDUCATORS IN 1818-'19.....	269-280
V. KINDERGARTEN AND CHILD CULTURE PAPERS, <i>Continued</i>	281-268
1. Child Life in Christ. <i>Rev. Slogford Brooks</i>	281
2. Problem of Popular Education Solved by Froebel Fichte.....	284
3. Further Development of the Kindergarten. <i>Fischer & Guillaum</i>	337
VI. PUBLIC LIBRARIES IN CONNECTICUT.....	366-376
VII. HIGHER EDUCATION OF WOMEN IN ENGLAND— <i>Third Article</i>	377-384
Astell—More—De Foe.....	377
VIII. COLLEGE EDUCATION FOR AMERICAN WOMEN.....	385-396
President Barnard's Plea for Admission to Columbia.....	385
IX. ART NORMAL SCHOOL IN MASSACHUSETTS.....	397-400
RECENT EXAMPLES OF SCHOOL ARCHITECTURE.....	401-448
Boston Latin and English High School.....	401
Letter of John D. Philbrick—with plans.....	405
Dedicatory Addresses.....	437

Contents for September—1881.

Portrait of William Chauncey Fowler, LL.D.....	440
I. MADAME HENRIETTA BRAYMANN SCHLÄDER.....	451-473
Memoir and Educational Principles and Institution.....	451
Visits to Institution in Berlin. <i>Mrs. Aldrich</i>	459
II. CRITICISMS ON FROEBEL SYSTEM AS NOW LIMITED. <i>De Portugal</i>	473-480
III. CHILD CULTURE IN FRANCE AND BELGIUM.....	481-496
IV. EDUCATIONAL BIOGRAPHY—William C. Fowler.....	497-500
V. FEMALE EDUCATION IN NEW ENGLAND.....	501-528
1. Connecticut—prior to 1800. <i>Continued</i>	501
2. Massachusetts—Academies for Females.....	521
VI. PIONEER SUGGESTIONS AND WORK IN CHILD CULTURE.....	529-580
1. Thomas H. Gallaudet—Model Infant, and Primary School.....	529
2. Thomas Hunter—Normal College for Girls.....	538
3. Mrs. Kraus—Reminiscences of.....	550
4. Miss Garland and Miss Weston in Boston.....	550
VII. PROFESSIONAL TRAINING IN COLLEGE, AND FOR COLLEGE WORK.....	561-602
1. Scotland—University Chairs of Education.....	561
2. Prussia—Training for Gymnasias and Universities.....	577

Contents for December—1881.

Portraits of Prof. John Kraus and Madame Kraus-Boelte.....	593
I. THE KINDERGARTEN IN PUBLIC SCHOOL SYSTEM.....	593-650
1. Miss Susan E. Blow—St. Louis.....	595
2. William T. Harris—St. Louis.....	635
II. CHARITY KINDERGARTEN FOR NEGLECTED CHILDREN.....	651
III. COMMON SCHOOL SYSTEM OF CONNECTICUT.....	657-704
Statistical Tables for 1879-'80.....	657
IV. CHURCH WORK AND THE KINDERGARTEN. <i>Rev. Heber Newton</i>	705-736
V. EARLY TRAINING—SUGGESTIONS, ANCIENT AND MODERN.....	737-768

INTERNATIONAL EDUCATIONAL CONGRESS

AT BRUSSELS IN AUGUST, 1880.

THE BELGIAN EDUCATIONAL LEAGUE, a national association of the progressive teachers and school men of Belgium, which has held monthly meetings for papers and discussion on the organization, administration, instruction, and discipline of schools of every grade, public, private, and ecclesiastical, in Belgium, has made arrangements to hold a General Assembly of Teachers and Educators in Brussels, from August 22d to the 29th inclusive—under the honorary presidency of the Minister of Public Instruction.

The Executive Committee, appointed by the League, is composed of men of eminent practical ability, of which H. Augustus Couvreur is President, and M. Charles Buis, Secretary-General.

The original call, issued more than a year ago, was signed by many prominent educators from all the states of Europe, and the recent Circular of the General Committee bears the names of some three hundred individuals connected with the Ministry of Public Instruction, the universities, the normal schools, and other institutions and the Public Press in their several countries.

The programme of proceedings issued by the General Committee contains over ninety subjects, on which special papers or discussions are invited, and in the main provided for. These subjects are assigned to six sections, viz.: (1) Primary Instruction, including Creches', Kindergarten, infant schools, etc.; (2) Secondary Instruction; (3) Superior Instruction; (4) Special Schools, professional, technical, agricultural, commercial, normal; (5) Adult Education; (6) School Hygiene. Each section has a secretary, and will hold sectional meetings, and certain topics belonging to each section will be presented in written papers, and for discussion in the general meeting of the whole congress.

The congress is composed of regular and associate members. All may take part in the deliberations who register their names, thereby agreeing to the general regulations. Regular members will pay a fee of twenty francs, and will be entitled to a copy of the printed transactions, and to three ladies' tickets to the meetings of the congress. Certificated male and female teachers, and professors of secondary schools may become regular members by paying a fee of ten francs.

Educational Societies and corporations can send delegates.

Speakers and contributors of papers can use any language they prefer—and if not in French, the substance of the speeches and papers will be translated by officers of the congress.

A bureau of information for procuring lodgings will be organized, and all communications intended for the Congress can be addressed to M. Ch. Buis, *Secretary-General*, Brussels, Belgium.

For circular giving the topics to be discussed and other information, address Commissioner John Eaton, Bureau of Education, Department of the Interior, Washington, who will forward any correspondence of those who wish to become members for the purpose of attendance, or to receive the reports.

HENRY BARNARD,

Member of General Committee.

SUMMARY OF PROCEEDINGS.*

The International Congress of Education met August 22, in the Hall of the *Athénée Royal*, the great Modern School of Brussels. The chair was taken at 11.30 a.m., by M. VanHumbecck, Minister of Public Instruction.

M. Couvreur, the President of the General Committee, after welcoming the visitors, said:—"This is not an official Congress. It originated with a resolution of the *League of Instruction*, but its members are in no way bound to the principles of the *League*. The Belgian Government, in the same spirit, has given its sanction and patronage to the Committee of Organization, and the Minister of Public Instruction has accepted the office of *Honorary President*. The delegates of foreign governments, and the members of the Congress generally, are bound by no political, religious, or educational creed, but are all met for the purpose of free discussion, with the one end of arriving at the truth. The efforts of the Committee of Organization have been already crowned with success. I need only point to the numerous assembly before me, the representatives that nearly every government has sent, and the remarkable volume of reports that has been put into your hands. If it produced nothing else, it would have done a useful work. To what is this success due? In a great measure, no doubt, to the influence of the *League*, the activity of the Organizing Committee, and the concurrence of the Belgian and foreign governments. But all these are but the effects of a more general cause,—the public interest which, during the last few years, has been awakened among all civilized nations, in the intellectual and moral development of humanity. The growth of this sentiment has been gradual; but now that the current has set in this direction, it bears all along with it, parties, sects, laymen, and clerics, even those who embark on the ship of Education only in hope of stopping the navigation. The chief characteristic of this age, and its greatest glory, will be the popularization of education. This benefit we owe to the advance of democracy. In a state of society when each man is called upon to master for himself questions of religion, politics, and economy, which before occupied only statesmen and philosophers, public security and material prosperity, nay, the very existence of a nation, depend on the general culture and intelligence of its citizens. . . .

We want knowledge and experience to avoid quicksands and steer the straightest course. To resolve the problems of education, there is but one sound method, that which we are beginning to apply in our schools, the method of observation. This is our *motif* in asking this Congress to act as a commission of inquiry, to amass facts and discuss problems, but not to pass resolutions. This is not to diminish its importance, but to assign it a *rôle* analogous to that of the press. A Congress brings to the light of common day ideas that have lain buried in musty tomes, or the proceedings of learned societies. It ventilates, it popularizes, it elucidates and simplifies knowledge; it controls, and so ends by gaining public opinion, and then is recognized and embodied in legislation. Thus without votes, which increase the responsibility without increasing the usefulness, a Congress is one of the most effective forms of self-government, the forerunner and counselor of legislation.

M. Vanhumbecck, the Minister of Public Instruction, after referring to the *fités*, of which the Congress formed part, said that the ideal of primary education was to make each acquainted with the powers he possessed by nature; to form the judgment by stimulating the observation. It must rid itself of pedantic verbalism; it must encourage, at the same time, exactitude and activ-

*Abridged from *English Journal of Education* for October, 1880.

ity; and, above all, must implant the notion of duty. Of higher education, he said, that observation and experimentation would in future have a larger place. The student, by not merely verifying past discoveries, but remaking them for himself, would acquire the spirit of research. He was far from depreciating memory, but it must be acknowledged that ancient methods aimed exclusively at the cultivation of this faculty, and neglected the judgment and stunted the imagination which they pretend to develop. . . . Different nationalities are here met to compare notes and take counsel together. In old days each nation thought that its greatness depended on weakening other nations. Now all civilized nations combine to discuss the best methods of advancing the intellectual, material, and moral progress of mankind. The millennium of universal brotherhood is still far distant, but we have left behind the days of universal mistrust and hereditary hostilities. . .

Monday, August 23.

The Congress was divided into six sections:—1. Primary Education, in two divisions, A. B., treating general and special questions. 2. Secondary Education. 3. Higher Education. 4. Technical and Special Education. 5. Education of Adults. 6. School Hygiene. The questions proposed occupy five columns of the *Bulletin du Congrès*, and a full report would fill several numbers of the *Journal*. We can only glance at the chief points of interest, and notice the more remarkable speeches. The most popular section was the first in which the Kindergarten, its value and extension, were largely discussed.

The principal conclusions arrived at by section B., were:—1. That lectures should be instituted not only for intended, but actual teachers; and that every elementary teacher should be required to show a knowledge of Froebel's system. 2. There should be transition classes between the Kindergarten and the primary school. 3. No class in a Kindergarten should exceed fifty.

M. Salicis, Répétiteur at the École Polytechnique of Paris, spoke in favor of industrial schools, in which primary education, as now understood, should be combined with the teaching of some manual art. He said, that at present 'Jacques Bonhomme' sent his child to school only on compulsion, because he felt that the education he received had little or no bearing on his future life and calling. Children who are destined to be laborers or bricklayers or carpenters, are taught as if they were intended for notaries, and all the prizes go to the best calligraphist or the best grammarian. *Faisons des hommes* is the watchword of the modern school of education, but primary education only makes half men; it trains the mind, but neglects the hand; it teaches the alphabet, but does not impart the rudiments of manual dexterity. By help of a subvention, he has founded at Paris "a school of apprenticeship" (*la rue Tournefort*) in which these ideas have been carried out, and M. Gréard, the Government Inspector, reports that the intellectual education of the children has gained rather than suffered by the addition of manual training.

M. Slnys, the Director of the École Modèle of Brussels, held that the end of the legislator is not to secure the acquisition of determinate knowledge, such as reading. The lower classes do not read, even when they know how to read. The laborer or workman, living in a world void of ideas, is not likely to interest himself in a book which he will not understand, because his faculties of observation and reflection have lain fallow. Primary schools, founded on purely utilitarian principles, are certain to break down, because it is impossible to assimilate knowledge given before the mind is ripe for them. What is wanted is to arouse and educe the faculties the child already possesses, to preserve the

natural harmony between intellectual and physical powers, to teach him by degrees the rudiments of the sciences which he will learn later on, and, at the same time, not to neglect his moral culture. This is what Froebel's system does for infants, and the Model School is an application of Froebel's principles to primary education. "Scientific teaching in a primary school should be given in the lower classes by direct intuition; in the middle classes by the analytic method; and in the upper classes by the synthetic method."

Tuesday Morning.

In section 1, the chief subject discussed was mixed [boys' and girls'] schools. The general feeling of the section seemed in favor of mixed schools up to the age of nine or ten, and of women as teachers for such schools. Above that age, it was held that the difference of manners on the Continent—the comparative seclusion of girls—would be fatal to the adoption of the American system.

M. VanderKindere, Professor of the University of Brussels, said,—“The ideal of education is to impart to each man the accumulated knowledge of the past. This is an impossible ideal, but each age has tried in its own way to approximate to it. The ideal of the renaissance was a thorough knowledge of the classics. The middle ages originated nothing in education. Of modern times, the two characteristics are the development of science and international intercourse. These two facts should be represented in modern education. We must study science and modern languages. This has been more or less admitted, and our schoolmasters have tried to sew the new studies on to the old rags of antiquity, but the result has been a miserable failure. We have tried to serve two masters, and satisfied neither. What we want is a renovated programme. The weakest must go to the wall, and in this case there can be no doubt that the weakest is classics. We hear much of the advantages of a study of Latin, and it is constantly being dinned into our ears, that without Latin no one can be said to be really educated. That this may have been so once, I do not deny, but then the study was thorough, and I say that it was the method and not the language that educated our forefathers. What does an ordinary boy who leaves school, hardly able to hammer out an easy bit of Cicero by help of a dictionary, know of antiquity? Now-a-days we know a little of everything; in other words, we know nothing.” The outcome of these considerations is, that we must give to sciences and modern languages a larger share in our secondary education, and the time for this must be gained by beginning Latin much later, and (though I regret the necessity) by excluding Greek.

M. Stecher, Professor at the University of Liège, agreed on the whole with the last speaker, but considered that the question between the Humanists and the Utilitarians was still an open one, and pedagogy had not said its last word. The problem was to establish a progressive and uninterrupted course of study; to prepare boys at the same time for practical life and for the Universities; to keep on stimulating the appetite for new studies, and yet to give a boy, who does not intend to finish the curriculum, a stock of knowledge that shall be complete as far as it goes, and of service in his business or occupation. To reconcile as far as possible these two contending interests, the system of bifurcation has been invented, and we have *Real-schulen* side by side with the *Gymnasien*. But this is only a compromise. The unity of studies is sacrificed, and it is impossible with a young boy to tell for which branch he is best fitted. To give up classics is a crude solution. Minds may also be enervated by science, as well as by classics.

Wednesday, August 25.

The first section was occupied with the question of Liberty of Teaching, i. e., how far Education should be controlled by the State? The question has not the same interest for us that it has on the Continent, where, as a rule, every teacher is under official control.

M Brock gave an interesting account of the system of elementary education in Norway, which most nearly approximates to England. Primary education is obligatory and gratuitous. In each commune there is a School-Board, which appoints certificated masters; but, side by side with the Government schools, there are private schools. In Norway any one is free to teach, but the State reserves for itself the right of inspection. If the inspector reports that in any private school the pupils do not come up to the fixed standard, the school is disqualified, and the pupils are forced to attend a Government school.

In the afternoon session of the General Assembly, the question proposed was: "Should higher education be confined to the acquiring of professional aptitudes. (1) Should not University studies aim at disseminating among the upper classes the essential element of all the sciences, and thus encourage the general education of the nation? (2) Is it desirable, in the cause of science, to organize higher studies, apart from the regular curriculum of the University; and how should they be organized?"

Dr. de Roubaix, Professor at the University of Brussels, said: "I shall confine my remarks chiefly to the Universities of Belgium. It is plain that the main object of a University is to diffuse knowledge and popularize science. It follows that its chief business is, not research, but an exposition of the whole range of existing knowledge. The programme of our Belgian Universities fairly realizes this ideal. It is true, that we are often charged with being too practical, and neglecting pure science, and I candidly allow that there is some truth in the charge. The remedy, however, in our case, is not to annex to our Universities higher courses for honor men (*instituts de perfectionnement*) such as they have in Germany. They would cost too much; we have no rich endowment, and the nation is not enough alive to their importance to pay for them. We ought to concentrate our resources on a single central institution for scientific research; this would attract the best intellects, and would not impoverish the Universities, but constitute a bank, on which they could draw for professors.

Dr. Crocq, of the same University, after a disquisition on the main distinction between the utilitarian and scientific faculties, and the types of men in whom they respectively predominate, inferred that the University must be so constituted as to include both—in plain English, there must be pass and class men. Before the French invasion, Louvain had, like the German Universities, its licentiates and doctors; all this was upset by the French in 1814. At the beginning of the century there was no higher education in Belgium, and the erection of the three Universities of Ghent, Liège, and Louvain was an immense service that the Dutch government rendered to this country. Notwithstanding, one of the grievances formulated against the Dutch government in 1830, was the number of the Universities; and yet, in 1835, a fourth—that of Brussels—was founded. Of these four, three recognize no other dogma than that of science. Louvain alone is denominational, and the speaker would not wish it otherwise, for science can only gain by the vigor of its opponents.

Dr. Crocq next explained the German University system, which he admired, but "sans fétichisme." It was excellent for real students of science, but not for

those whose only object is to gain a diploma. Hence the number of specialists, i.e., incomplete savants, in Germany. For medicine specialization is impossible; you cannot know a part of the science without knowing the whole. The physician must have taken a survey of the whole field, before he pursues any branch separately. The great German philosophers and savants never had any practical notions of the immediate application of scientific knowledge. Against this excess of pure science a reaction is going on in Germany, and utilitarianism is fast gaining ground. The scepter is fast passing from Germany, and it would seem as if Italy was destined to be her successor. France offers a better example than Germany for Belgium to follow. There is the *Collège de France*, and the *École des hautes études*; bodies which pursue science simply without giving diplomas; while, for professional studies, there are the faculties of the University. Such bodies form a sort of normal school for higher education.

M. Tempels, the Vice-President, pointed out that the faculties into which the Belgian Universities were divided, made no provision for giving a general basis of knowledge on which all special studies should rest. Again, in his care to develop professional aptitudes, the legislator wholly neglected political education. There ought, in all Universities, to be a course of constitutional history, of international law, and of political economy. There ought, also, to be a course of the history of religions. The history of religion is, as it were, the soul of history; it shows us the main currents of the ages, and the highest aspiration of mankind; it is not inconsistent with free thought and perfect liberty of conscience. Another side of education that the Universities neglected, was the moral training of the student. Debating societies, literary clubs, musical unions, etc., would be found to promote public spirit and *esprit de corps*. To sum up, the duty of a University is not only to manufacture savants, but to train up citizens, and to diffuse culture among the higher classes.

M. Thomas and M. Beausaire both protested against M. Crocq's proposal to create special scientific institutions; such a divorce would be a fatal blow both to science and to professional study. The scientific colleges would be empty, and the professional training would be barren. "Found as many professorships as you like," said M. Beausaire, "the more the better, and make the different courses optional, but let them be united in one University."

Thursday, August 26.

In the first and second sections, Normal Schools was the question of the day. In the first, the debate, lively but local, would hardly interest our readers.

In the second section, the debate was less animated, but more instructive. Professor Stoy, of Jena, drew a vigorous sketch of an ideal normal school for secondary education. Two conditions he declared essential; it must have annexed to it a school in which candidates can learn their business by experiment, and be tested themselves; and it must be in a university town, or at least in some great intellectual center. But the *pièce de résistance* of the session was the account of the École Normale of Paris, by its director, M. Fustel de Coulanges, the worthy successor of M. Bérriot.

M. de Coulanges is a firm believer in classical culture, and he helped to restore the balance against the preponderating weight of the scientists. "If I am asked, he said, what courses of pedagogy we have in our École Normale, I must answer, none. Our pedagogy consists in making our pupils study everything thoroughly. History, for example, is studied only in the original sources. We put the documents, chronicles, treatises, etc., into their hands, and tell

them to digest, analyze, compare, and sum up. Experience has proved that this course of study produces the best professors. After a trial of a fortnight, which is almost nominal, during which the candidate attends a selected school, takes classes, and receives hints from the director, he enters on his functions at once. The signal successes are numerous, the failures comparatively rare. The other method was tried and deliberately abandoned. In 1853, every professor had to undergo a probation of two years in some school, but it was found that the best men were irked by this position of *professeurs fainçants*, and either threw up their appointments or wearied of their work before they had begun. The weak point of our professors is not inexperience and want of tact, but *ennui*. The younger the teacher the better. As to the question of *internats* versus *externats*, I am strongly in favor of the former. A common life not only promotes professional feeling, but is in itself a liberal education."

To Mr. Browning, who has insisted on the triple necessity for a teacher of knowing the history of education, psychology, and the practical art of discipline, and who has given us an account of what has been done to meet these needs by the Teachers' Syndicate at Cambridge, "I would reply that with us the history of education is included in the general study of history; psychology forms one of the courses of the *École Normale*; and as to discipline, a failure in that respect with our pupils is a very rare occurrence. After all, the best preparation for a teacher is a thorough knowledge of the subjects he has to teach, and an enthusiasm for truth and goodness (*aimer le vrai et le bien*)."

Professor Pisko, of Vienna, gave an interesting account of the normal schools of Austria. For primary schools, the training of masters is much the same as in France. For secondary schools, the candidates follow a three years' course at the University, and after their final examination, which includes pedagogy, are sent as *Probe Candidaten* to schools selected by the government inspectors, in order to follow the lessons of professors who have gained a reputation in any branch of teaching.

Friday, August 27.

In the first section, a debate on Memory was not very fruitful in practical help for the teacher.

In the second section, the question proposed was, "Ought the curriculum of secondary education to correspond to the special higher studies that the pupil intends to pursue; or ought it to aim at giving a general culture to serve as the common basis and preparation for all special studies?" Actually the question was narrowed to the old quarrel between the Scientists and the Humanists.

M. Wagener, Administrative Inspector of the University of Ghent, found a solution of the question, not in any modification of programmes, but in extending the years of study. A German devoted nine years to secondary education, a Belgian only six. He was the last to depreciate the value of modern languages, and had himself advocated their introduction in Belgium as part of the first stage of secondary education. At the same time, he was convinced that they would never take the place of a study of antiquity. In a recent tour through Germany, he had taken pains to gather the opinions of all the most distinguished scientific men, and had found that, with few exceptions, they were in favor of retaining the study of ancient languages.

Mr. Oscar Browning thought the attempt to formulate a universal system of education chimerical. His ideal was the Port Royal system, in which there was no general programme, but the personal influence of the master was brought to bear on a small number of pupils. Herbert Spencer went even farther than

this, and, in a private conversation with Mr. Browning, had maintained that schools were an excrescence and an impertinence, the only real education being that gained by life and experience. Without endorsing his illustrious friend's opinion, he quoted it as a protest against exclusiveness and excessive systematization. The education of the middle ages had had bare justice dealt it. Dante alone is proof that it was sufficient to develop all the faculties of man. He did wish, indeed, *stars super antiquas vias*, or to put new wine into old bottles. Science is the characteristic of our age, and scientific discoveries are preparing a new renaissance, just as the renaissance of the 15th century was wrought by the recovery of ancient literature. But we should never forget that our civilization is the resultant of Hellenism and Hebraism, and we cannot afford to neglect either force. We cannot, indeed, hope to pursue both *pari passu*: the encyclopedic education of the middle ages is no longer possible. But both may be pursued separately. We may pursue science without neglecting classics. Our danger is, not an excess of science, but idleness and ignorance. In any case let us not sacrifice Hellenism, one of the two bases of our civilization.

Saturday, August 28.

The first section, A., was unanimous in favor of gratuitous instruction, the only question raised being, whether it should extend, as in Switzerland, to secondary and higher education.

In the first section, B., M. Sluys expounded the theory and practice of *excursions scolaires*, of which some account has already been given.

M. Sluys called the attention of the section to the curious fact that corporal punishment still existed in certain civilized countries, such as Saxony and England, a survival like suttee and cannibalism. In his model school there were no prizes, and no punishment, except dismissal from the class. If a boy was idle, or played the fool, he simply said to him, *Allez vous promener*. Extra lessons were only one degree less barbarous than castigation; they made work a punishment. Discipline must rest, not on the personal superiority of the master, but on the idea of law, an idea that cannot be too early impressed on children: "This is the law of the school to which you and I are equally bound."

Miss Archer gave a most interesting account of the Victoria Lyceum, an institution founded by her at Berlin, with the assistance of the Crown Princess, in order to continue and supplement the defective education of grown-up women. The idea was suggested by the constant complaints she heard from mothers, that they felt out of *rapport* with their educated daughters, who lived in a world from which they were shut out by reason of their ignorance, an ignorance which seemed to them past cure. Last year the *conférences* and classes of the Victoria Lyceum had been attended by more than 7,000 ladies.

Official Publications.

[The Preliminary Reports, forwarded to the Secretary of the General Committee, in response to assignments by the Executive Committee, were submitted to the Congress, in a well printed volume of 983 pages, octavo. Of the *Rapports Preliminaires*, in the Section of Primary Instruction, devoted to the Kindergarten, we shall publish those by Jules Guillaume, of Brussels; Mr. Fischer, President of the Vienna Froebel Society; M. Sluys, Director of Model School of Belgian League; Madame de Portugall, Inspectress of Infant Schools in Canton Geneva, and Miss Caroline Proglar, Directress of Special Course for Kindergartners in Geneva.—Ed. *American Journal of Education*.]

A FAITHFUL MINISTRY AND SCHOOLS OF LEARNING.

A Sermon preached the Day after Commencement, by CHARLES CHAUNCEY, B.D.,
President of Harvard College in New England, 1663.¹

AMOS, II, 2. AND I RAISED UP OF YOUR SONS FOR PROPHETS, AND OF
YOUR YOUNG MEN FOR NAZARITES, IS IT NOT SO, O YE
CHILDREN OF ISRAEL, SAITH THE LORD?

THE Spirit of God by the Prophet Amos seems to aggravate the sins of Judah and Israel, mentioned from verses 4-9, by calling to remembrance the mercies bestowed upon them. And four mercies especially are here mentioned: 1. The destruction of the Amorites before them (under whom are comprehended all the Canaanites), which mercy is amplified in two ways: (1). By the mighty stature and strength of this people (that their height was like the height of cedar, and he was strong as the oaks); (2). by their utter destruction (*yet I destroyed his fruit from above, and his roots from beneath*); we gather the fruit of trees many times, yet the tree stands many a year and bears new fruits, so the Lord doth impoverish a people, and suffer all their cattle and substance to be taken away, or plundered by their enemies, which do afterwards recover themselves and flourish again, but when a tree is rooted up, there is no more hope of it: thus did the Lord pluck up the Amorites by the roots, notwithstanding their cedar-like tallness, and strength as heart of oak. This is the first mercy mentioned.

2. The Lord telleth them of their deliverance out of Egypt, *vers* 10, which the Lord often insists upon. 3. Of their safe conduct through the wilderness forty years together, and these were three great blessings, yet they were but temporal; but the next and last passeth all the rest, and is spiritual. 4. *I raised up of your sons, &c.*; this is that blessing that is now to be spoken of.

There are two general parts of the text: 1. A description of the spiritual benefit bestowed, in the first words [*I raised up of your sons, etc.*]. 2. A testification that such a benefit was bestowed in the last words [*is it not so, O ye children of Israel, saith the Lord?*]. In the description we may note: (1.) The cause and author of this benefit [*the Lord*]. (2.) The manner of working [*I raised up*]. (3.) The benefit and effect itself [*Prophets and Nazarites*] amplified by the persons that were so raised up [*your sons and your young men*].

2. For the testification it is set down in the form of a question; wherein, note: (1.) Who makes the question? [*The Lord*]. (2.) The persons to whom the question is made? [*the people of Israel*]. (3.) The intent and meaning of the question, which is a strong and vehement asseveration, for the meaning of [*is it not so*] is, that it is certainly so.

Now to open the meaning of the words. And I] that destroyed the Amorites, etc., was the selfsame person and power that raised up these prophets among you. Raised up] word for word; I made them to arise; I made

¹Annotations 1-18 at the end.

prophets to arise from among your sons; or, I made them to be such. In this sense the word is used: *Deut. 34, x, there arose not a prophet since in Israel like unto Moses*; and (among them that were of women, there arose not a greater than John the Baptist.) so then here *I raised up*, viz.: I made them to be prophets; I raised them out of low condition as if I had raised them out of the dust. *I have raised up of your sons*], or from among your sons, that is, some of your sons (saith Mercer).³ If they were prophets, though strangers, it were no small mercy, but to raise them up from among your sons, such as came forth out of your own loins (as Samuel and Jeremiah were), this far exceeds the other.

For prophets, not only do foretell things to come, but faithfully teach and instruct you, for there were two sorts of the prophets in these times of the Old Testament: 1. Such as were taught in schools (as Samuel), under the discipline of other prophets; such were usually called the 'sons of the prophets,' *2 Kings, 4, 1 and 6, 1*. This may appear by comparing together *2 Kings, 2, 13*, and verse 8, of the same chapter, verse 13, Elisha said, *my father, my father, the chariots of Israel and the horsemen thereof*. Elijah was not Elisha's natural father, for it is said, verse 8, Elijah was Elisha's master, and so he was indeed; he taught him and instructed him, therefore the sons of prophets were such as were trained up under the prophets in good literature, and so fitted for the office of a prophet afterwards. 2. Others had their calling immediately from God, and were by Him extraordinarily inspired with gifts from above, as *Amos, 7, 14, 15*. Amos saith: *I was not a prophet, nor the son of a prophet, but I was an herdsman, and a gatherer of sycamore fruit*: that is, I was not trained up in any of the schools of the prophets, but I had another calling, until the Lord was pleased to advance me to the office and dignity of a prophet; and verse 15: *He took me as I followed the flock, and said, Prophecy to my people Israel*. Both these sorts of prophets may be understood here, both such as had their education in the schools of the prophets and such as were called immediately, and extraordinarily inspired. God was the raiser up of them both, for human instruction is not sufficient to make any man to be a prophet. Yea, and no less power of God and grace is requisite to raise up your sons to be prophets, whatsoever their education is, than where he doth inspire others immediately and extraordinarily, therefore, where extraordinary means is wanting, the goodness of God in blessing ordinary means must not be forgotten. [*Of your young men*.] It is spoken of young men emphatically, for it is a mighty change that young men that are addicted to their pleasures and lusts, that now they should be so changed as to preach Christ and to favor heavenly things, and to be set apart to God. [*To be Nazarites*.] The Nazarites were *separati* (saith Mercer), men separated from vulgar delights, that they might apply themselves and their study to the word of God and His worship. Some apply that which is spoken of our Saviour Christ: *Math. 2, He shall be called a Nazarene*, to have some reference to this vow of a Nazarite, but, no doubt, that place hath respect merely to the city Nazareth, which is derived of *Nazar*, that signifies to keep, and not of *Nazar* that signifies to separate.

So the Nazarites were separated from the vulgar sort of men to a strict course of life. The law of them is set down, *Num. 6*, which ye may read

at your leisure. Now, there were two sorts of Nazarites: some limited to a certain time, others were perpetual; and these latter were consecrated to the study of the word of God, and trained up thereunto from their childhood, under a severe discipline and austere course of life, that at length they might be able to go before the people of God, as well by soundness of doctrine as by the example of an holy life. So that now the meaning of the text is that although Almighty God had done great things for Judah and Israel, yet this benefit exceeded all the rest, that the Lord had provided a faithful ministry, not only extraordinary, but such as were raised from the posterity of his people by his blessing upon the schools of learning and means of education, to be separated unto God, and set apart for the work of God in the salvation of men's souls.^a

Doctrine: It is a special blessing of God to His people, when He affords and blesses the means of instruction for the education of youth, to raise up some from our children and young men, and to fit them for the work of the ministry. It is a blessing of God, for he saith [*I raised up*] no creature alone can do it; it is a special blessing; more than deliverance from any outward enemies, as the Amorites and Canaanites were, for they had but an arm of flesh; but here are spiritual wickednesses that be vanquished; it is greater than the deliverance out of Egypt, for many that were delivered from thence afterwards perished, *Jude 5*.

It is a greater mercy than the Lord showed to His people in leading them through the wilderness forty years, though herein there was the Angel of God's presence that went before them, in the pillar of cloud and fire, that directed them and kept them in all their way, yet neither was that mercy comparable to that in the text, for that was mainly an outward help; for, notwithstanding that there were six hundred thousand of them, whose carcases fell in the wilderness; but in this spiritual mercy eternal destruction is prevented. This, therefore, exceeds all the rest; and there is another kind of the Lord's presence walking in the midst of the golden candlesticks, which brings us to spiritual and everlasting peace and mercy in the ministry of God's servants.

For the further proof of this ye may observe that the Lord much stands upon this, on all occasions, as the greatest favor in sending of His prophets and ministers and messengers unto His people, as *2 Chron. 36, 15*:* 'The Lord God of your fathers, sent unto you by his messengers, rising up early and sending them' (when, as God's ministers rise up betimes, then God Himself is said to rise up betimes, God will not sleep when His ministers wake). Why did the Lord thus arise and send? Because He had compassion on His people and on His habitation; because of the bowels of His pity and compassion on the poor souls of His people, so, *Jer. 3, 15*, when He promises to give pastors after His own heart to feed them with knowledge and understanding, upon their unfeigned repentance. Yea, this is such a mercy that it may comfort the hearts of God's people whatsoever their afflictions be, as the Lord saith: *Isaiah 80, 20*, 'though I feed them with the bread of affliction and give them the water of affliction to drink, yet their eyes shall see their teachers, and their teachers shall not be removed into a corner any

* The citations, which in the printed copy are in *italic*, in this and subsequent instances are distinguished by inverted commas.

more'; as if He had said, though your afflictions are heavy, yet this shall be a mitigation of them, that you shall have faithful teachers to instruct you still. This will surely mitigate and lighten all other afflictions; yea, this will lift up God's people above all their afflictions; will lift them up to heaven, as it is spoken of Capernaum, *Mat. 11*, and observable is that of Paul: *Rom. 15, 29*, 'I know that when I come unto you I shall come in the fullness of the blessings of the Gospel.' Ye see that there is a fullness of blessing in the preaching of the Gospel; they are but shallow blessings, in comparison, that we have in outward things.

But now, when the Lord raised up our sons and young men to be our prophets and ministers, the blessing is greatly increased. Ye may remember how marvelously Zacharias was affected, *Luke 1, 67*, when it was revealed to him by the angel that he should have a son that should turn many of the children of Israel to the Lord their God; that is, that he should serve Him in the work of the ministry, and should come in the spirit and power of Elias. What joy and gladness he was filled withal? and broke forth into that heavenly song of praises unto the Lord, and next, unto the mercy of God in Christ. He praises Him for John Baptist and saith: *verse 76*. 'Thou, child, shalt be called the Prophet of the Highest, for thou shalt go before the face of the Lord to prepare His ways, to give knowledge of salvation to His people by the remission of their sins.' This was the great argument of his praises: not only that John Baptist should be a prophet, and should give knowledge of salvation to God's people, but that his child should serve God in so high and heavenly a calling, and so great an employment. So it was granted for a great blessing that the Lord promised to Phinehas: *Numb. 25, 13*, 'He shall have it, and his seed after him, even the covenant of an everlasting priesthood, because he was zealous for his God, and made an atonement for the children of Israel'; if the Lord had not accounted this a great mercy he would never have given it as a reward to His faithful servant, neither on the contrary would the Lord have laid this as a heavy judgment on Eli's house, that He cut them off from His altar, that is, He deprived them utterly from the office of the priesthood, which afterwards the Lord did when He cut off, by the hands of Saul, Nob, the city of the priests. Thus the point is sufficiently cleared by Scripture.

Reason 1. This must needs be a great blessing, because the ministry is purchased at so high a rate and the business was so great to set it up, now the providing of an able and faithful ministry cost much, and it was a mighty business to set it up.

Ephs. 4, 8, Christ ascended up on high and led captivity captive, and gave gifts unto men: first, that Christ must not only descend into the lower parts of the earth, but He must ascend into heaven, far above all principalities and powers. 2. He must lead captivity captive, that is, over sin, Satan, and whatsoever had led us away captive, to do this. If all the powers of darkness could hinder it, there should never have been a faithful ministry set up, therefore Christ must captivate all these for this end. This sheweth the blessing to be exceeding great, that so great a means was requisite for the procuring of it.

Reason 2. There is in the same place annexed another reason to prove the greatness of this blessing, taken from the excellency of the end of it:

verses 11, 12, 'He gave some apostles, and some prophets, and some evangelists, and some pastors and teachers, for the perfecting of the saints for the work of the ministry, and for edifying of the body of Christ,' as if he had said that this benefit is of so great a necessity that it concerns both the gathering and building up and the eternal salvation of the elect.

Objection: it will be said that this was but for a short time, that the apostles and prophets and evangelists did continue.

Answer. But we have the writings of the apostles, prophets, and evangelists to the end, and we must have ordinary ministers, pastors, and teachers till we all come into the unity of the faith and the knowledge of the Son of God, unto a perfect man, unto the measure of the stature of the fullness of Christ; that is, to the end of the world and the consummation of all things, and, therefore, it is an hellish delusion to conceive that the ministry should be lost quite and disannulled by anti-Christian superstition, for this assertion doth plainly annihilate both the Church and saints, and any further salvation of any souls, which were impious to conceive.

Reason 3. I may reason from the difficulty of the work and the calling of the prophets and Nazarites, it is a very high dignity for our sons and young men to be advanced unto. It is such a dignity as God only can bestow, and such as they be raised up by God Himself unto it. The prophet is the name of Seers: 1 Sam. 9, 9, 'They have better eyes than other men, they are the men of God (as the mountains of God and cedars of God are so called), by way of excellency, the persons that have more of God in them than other men, they are nearest unto God; Levit. 10, 8, and they bring others also nearer unto God. Yea, the calling of a prophet is such an honor, as that title was given to the Lord Jesus Christ Himself: Deut. 18, 18. So the Galatians received Paul as Jesus Christ Himself; Gal. 4, 14. Likewise to be a Nazarite is a mighty dignity, for our sons and young men to be separated to the Lord and sanctified for His service is no small preferment (they are called ἀκριβοῦς καὶ ἡγιασμένοι by the Septuagints): Lam. 4, 7, 'Her Nazarites were whiter than snow, purer than milk, more ruddy in body than rubies, their polishing was of sapphire'; that is, they were the most beautiful persons in the sight of God of all others. This is a mighty excellency, therefore the blessing must needs be great.

Reason 4. It is an invaluable mercy for parents and old men that their children and young men are thus qualified and dignified. It is a singular blessing to have a gracious child: 3 John 4, 'I have no greater joy than to hear that my children walk in the truth'; greatest joys are fruits of the greatest blessings possessed by us. It is the first of Solomon's Proverbs, Chap. 10, 1: 'A wise son maketh a glad father,' but to have a child that will make others wise is a far greater joy to a parent. Dan. 12, 3, 'They that make others wise shall shine as the brightness of the firmament, and they that turn many to righteousness as the stars for ever and ever.' So what a joy is it for the aged to see godly young ones growing up, that the Lord gives us hope of future generations. Isa. 58, 12, 'They that shall be of thee shall build up the old waste places, and thou shalt raise up the foundations of many generations, etc.' It is more when they do these great things that shall be of us, viz.: of our own posterity, but next it is comfortable, when as the younger sort are hopeful and promising, that the Lord gives us to

conclude that the future harvest is great, when he sends forth already so many laborers.

USE 1. It is a ground of just double reproof: 1. Of our great unthankfulness unto God, that hath bestowed this great mercy upon New England, and let it be considered how it hath been generally entertained by the country: I may speak unto you, men, brethren, and fathers, in the language of Samuel: 1 *Sam.* 12, 7, 'Stand still, that I may reason with you before the Lord, of all the righteous acts of the Lord, which He did to you and to your fathers;' and then he telleth them of the Lord's sending of Moses and Aaron, and bringing them out of the land of Egypt, by the hand of these His servants. So I might relate unto you what the Lord hath done for this country in providing and sending hither a faithful, sound, and able ministry to them; that he hath also in great part graciously preserved and continued unto them, and, as if this had been too little, He hath added this 'in raising up of our sons to be prophets, etc.' He hath wonderfully erected schools of learning and means of education for our children, that there might be continually some comfortable supply and succession in the ministry.⁴ Is it not so, O ye people of God, in New England? If it hath been so, and be so still in a good measure, then let me testify against you in the Lord's name for great unthankfulness to the Lord for so great a mercy.

Now there be several degrees of this unthankfulness: As 1. To pass by a mercy without any serious acknowledgment thereof, as the Lord complains: *Hosea* 2, 8, 'Thou hast not known (or acknowledged) that I gave thee thy corn, or thy wine and oil, etc.' 2. To slight any mercy of the Lord, as the Israelites did, also, *Num.* 11, 6, 'Our soul (said they) is even dried up, there is nothing but this manna before our eyes, etc.' 3. To deny any mercy of God as they did: *Num.* 14, 8, They did not account it a mercy that the Lord brought them out of Egypt. 4. To account blessings for curses, as they at another time: *Deut.* 1, 27, 'Because the Lord hated us He hath brought us (into the wilderness) to destroy us.' 5. When as we abuse God's blessings to sin so much the more against the Lord, as the same people did: *Hosea* 10, 1, 'According to the multitude of his fruit he hath increased the altars; according to the goodness of his land, they have made goodly images.'

Now all this unthankfulness is found in many, and in some measure some in all at this day, for this great blessing of the ministry and the means of the continual success and succession therein.

1. Many will not acknowledge the mercy, but pass it by as a matter of little or no worth. The great blessing of a painful ministry is not regarded by covetous earth-worms, neither do the schools of learning that afford oil to the lamps come into their thoughts or language to praise the Lord for them. This is that sin reprov'd in Israel: *Jer.* 2, 6, 'Neither said they, Where is the Lord that brought us out of the land of Egypt?'

2. There are others that do slight these mercies some little good they apprehend in it; to have a minister to spend the Sabbath; to baptize their children; and schools to teach their children, and keep them out of harm's way, or teach them to write and read and cast accounts; but these despite the angel's bread, and account it but light stuff in comparison of other things. These are like Jashurun: *Deut.* 32, 15, 'That are fatted with other contentments, and do lightly esteem the rock of their salvation.'

3. There are others that deny this to be a mercy; there are many in the country that account it their happiness to live in the waste, howling wilderness, without any ministry, or schools and means of education for their posterity. They have much liberty (they think) by this want; they are not troubled with strict Sabbaths, but they may follow their worldly business at any time; and their children may drudge for them at plow, or hoe, or such like servile employments, that themselves may be eased; whereas the scripture saith: 2 *Chron.* 15, 3, That they that are without a teaching ministry are without the true God and without the law; surely so they are that do voluntarily make choice of such a condition; but their practice about their children is little better than the merciless, unnatural, and profaneness of the Israelites: *Psalms* 106, 36, 'That sacrificed their sons and their daughters unto devils.'

4. Some go so far as to account these blessings to be curses, so as to say that our ministries are anti-Christian, and schools of learning, popish, and the seminaries of wickedness and looseness in the country. It is not my purpose to confute their scurrilous reproaches of the ministry (which are sufficiently confuted both by the doctrine and holy conversation of God's faithful servants), nor yet to plead for any dissolute courses or disorder that is found amongst scholars,⁵ but I desire rather to mourn for them, and to pray that some salt may be cast into the fountain that the waters may be healed; but let not whole societies or professions be charged or blemished for the failings or scandalous carriages of some. If there be one, or had been more Judases among the disciples of Christ, yet let not all the rest be indicted or arraigned for the viciousness and disloyalty of others.

5. Many do make wicked returns of these blessings, and fearfully abuse them, and seek what they can to weary out ministers and to put down schools of learning, or which is all one, to take away oil from the lamps, denying or withholding maintenance from them, whereby they do as good as say let them tumble and fall; 'raze them, raze them to the foundations.' There be others that do foment and abet oppositions against God's ministers, raise factions in churches and college, to make havoc and utter dissipation of all. I might add, also, the poor and slender requital (to speak no worse) of such as have, with most faithfulness and diligence, served the Lord and His Churches in works of so great importance.⁶ But I will spare the enlargement of these things, less that I pass my bounds both of my strength and time.

But now how extremely hateful to the Lord all this unthankfulness is, I need not be long in showing: *Deut.* 32, 6, 'Do ye thus requite the Lord, ye people, foolish and unwise?' and *Isa.* 1, 2, 3, 'Hear, O heavens, and give ear, O earth, for the Lord hath spoken: I have nourished and brought up children, and they have rebelled against me; the ox knows his owner, etc.'; and *Micah* 6, 2, 3, 'Hear, O ye mountains, the Lord's controversy with His people, and He will plead with Israel. O, my people, what have I done unto thee? Wherein have I wearied thee? Testify against me, for I brought thee out of the land of Egypt, and redeemed thee. This unthankfulness is that which causeth the Lord to take away His blessings from us:' *Hosea* 2, 8, 9, 'She did not know that I gave her corn and wine and oil; therefore will I return and take away her corn in the time thereof, and wine in the season thereof, and will recover my wool and my flax given to cover

her nakedness.' There is the same reason in other blessings, as if the Lord should say in this case: I will put out the light and take away the ministry, pull down the schools of learning, for this unthankfulness of yours, which also the Lord hath already done in some parts of this country.

The second branch of this reproof: 2. This serves to reprove whatsoever other sins God's people do commit enjoying these great mercies. Look at this as an aggravation of all our sins that the Lord hath done these great things for us. He hath subdued the Amorites—all our enemies, Indians and others, whose height was like the height of cedars, and they were strong as the oaks,—He brought us out of the land of Egypt, out of the iron furnace, from many grievous taskmasters, from under the prelates who set us to pick straws. He led us through this wilderness some near upon forty years, and hath strangely here provided for us. Now, lastly, He hath raised up of our sons for prophets, and our young men for Nazarites. Surely, then, the Lord may justly take it unkindly at our hands, that we have so exceedingly provoked Him by our many sins, and as He saith, 'For three transgressions of Judah and Israel, and for four, I will not turn away the punishment thereof.' For many, so He may say to us, for three transgressions of New England, and for four, I will not turn away the punishment thereof. And if God will not turn it away, it is beyond all other power in the world to do it.

There be diverse sins in Israel and Judah here reproved, which it would not be hard to find in New England, as the contempt of the law in Judah, and that their lies caused them to err. Suitably there is to be found in New England the contempt of the word of God and His ordinances, and listening to lying books and pamphlets, that are brought over into the country, whereby multitudes are poisoned amongst us.⁷ In the Israelites he reproveth these sins. Their false worship: *verse 8*, 'they set up false gods and divers altars, and turned Bethel, the house of God, into Bethaven, the house of iniquity.' This sin of corrupting the worship of God is studied by many even in churches, though not in such gross manner as Israel did.⁸ We have not such idols as they, but spiritual we have, in the fields and in our houses. The apostle calls *covetousness* idolatry. Another sin of theirs was oppression, which, no doubt, abounds exceedingly in this country,⁹ and mark what he saith.—'They sell the righteous for silver, and the poor for a pair of shoes.' Scarcely any commodity can be had but for silver. But suppose a poor man wants a pair of shoes or other clothes to cover his nakedness, that hath no silver, truly he must be fain almost to sell himself, to get some mean commodities. Another of their sins was that they gave their Nazarites wine to drink; but here I should rather say ye give the savages and Indians wine and strong waters, and truck with them for that which ye know they will abuse to drunkenness, if not to murder.¹⁰ Lastly, is said, they commanded the prophets, saying, 'prophecy not.' I will not so apply it as if there amongst us any command of authority of God to that purpose (yea, we have cause to bless God for the contrary commands and endeavors also of government amongst us), but there in too many places such carriage towards the Lord's prophets and the prophet's sons, that the ministry and schools of learning (as was said) are reproached, despised, impoverished, if not undone. Oh! (saith the Lord): *verse 13*, 'Behold I am pressed under you as a cart is pressed that is full of sheaves.' So the Lord is pressed under such carnal Gospellers. He is crushed (as far as they can) by such false-hearted professors. They

lay all the load upon the Lord Himself, and no doubt but the Lord will disburden Himself of them; and it is no marvel if the Lord by His ministers cries out against such wickedness in professors, and saith, as *Isa. 22, 1*, *The burden of the valley of vision*, that is, it is but equal if they that see more and know more than others and enjoy more means, do burden the Lord by their sins, the Lord in like manner should lay upon them the heavy burden of the threatenings of His word, and the execution thereof.

USE II. This may serve for instruction to scholars and students: 1. First, to show them what they should mainly intend study and labor for, viz.: that they may be prophets and Nazarites.¹¹

1. *Prophets.* *1 Cor. 12, last. Covet earnestly the best gifts.* As goodness is the object of the will, so the best things of the will rectified. And what are the best things? *1 Cor. 14, 1:* Desire spiritual gifts, but rather that ye may prophesy; amongst all gifts the gift of prophesying is the best. And what is prophesying? but *1 Cor. 14, 4:* speaking to edification, exhortation, and the comfort of others, this is a public and a spiritual good, and, therefore, of an higher nature, and most of all to be attended by you, and aimed at in all your studies. It is a great matter also that the Lord takes the prophets to be near unto Him, as in the placing of the tribes in the camp of Israel: *Num. 1, 50, 53*, The Levites were to pitch round about the tabernacle of testimony (where the special presence of the Lord was), and the rest of the tribes without Levites farther off, so the prophets and Levites are nearest unto the Lord, which is a matter of comfort, assuring them of the Lord's presence, assistance, and protection in their calling; of dignity, as being next unto God, and employed by Him about greatest service; and also of duty, in strict keeping of the Lord's charge, and holy walking before Him: for which purpose remember often the Lord's hand upon Hophni and Phineas, the sons of Eli; upon Nadab and Abihu, the sons of Aaron, whom the Lord slew for their profaneness, and said: *Levit. 10, 8*, that 'He would be sanctified in all those that draw near unto Him, and before all the people would be glorified;' that is, that He would punish in some remarkable manner to the view of all, the scandalous carriage of any that were near unto Him in that function.

2. Consider further, it is that ye may be Nazarites; that is, set apart in a peculiar manner unto the Lord, or separated unto Him. Now there are three things in this separation unto the Lord: 1. A sequestration from wicked courses and companies, and from common things. From wicked ways and companies: *2 Cor. 6, 16*, 'Be ye separate and touch no unclean thing, etc.' To use the vessels of the temple to quaff and carouse in, was a Babylonish practice. Yea, there must be a sequestration from common things, as the Nazarites were from creatures and worldly delights and distractions. My meaning is, that you that are addicted this way should have less to do with the world and worldly delights, and be less cumbered than others with the affairs of this life. 2. In separation there is a dedication unto the Lord. Things that were of old separated, were dedicated and devoted to a holy use, as the Lord speaks of the Levites: *Numb. 16, 9*, 'The God of Israel hath separated you from the congregation of Israel to bring you near unto Himself.' Thus Hannah dedicated her first born unto the Lord: *1 Sam. 1, 18*, So are ye to be as persons devoted to the Lord. 3. There must be qualification with holiness. Other things separated unto

the Lord as the vessels of the sanctuary, and ministry, had a kind of a relative holiness; but in persons separated there should be inherent holiness. Students and especially ministers should have holiness upon their foreheads; that is, professed and practised and visible unto all. Thus you may see what it is to be a Nazarite, and what ye should aim at in your studies.

3. Hence students should be instructed how they may attain to these excellences, and how they may be had; for here we see that it was the Lord Himself that raised up these young ones to be prophets and Nazarites; and it is not either your own study or parts, nor the teaching and instruction of others that can possibly raise you up out of that dunghill wherein you lie, to this degree to be true prophets of the Lord, but it is the Lord Himself that must put underneath you His everlasting arms to raise you up. Therefore it concerns students to be much in prayer unto the Lord; daily and duly to draw near unto the Lord, to beg of Him the spirit of wisdom and revelation, and a blessing upon, and assistance in, your studies. Prayer was one of Luther's masters, and it was but reason that the priest should first offer up sacrifice for his own sins, and then for the sins of the people: *Hebbr. 7, 27*, First seek God for themselves, and then make intercession for others.

Objection. But now some may object. Hear the example of the Nazarites that they nourished their hair: they were not to suffer any razor to come upon their heads during the time of their separation: *Numb. 6, 5*, Here is a fair plea for students and ministers to wear long hair.¹⁹

Answer: Because that this objection comes fair and full in my way, give me leave to answer this objection. There is some need of it, and take it thus: 1. The Nazarites had a special commandment from God to nourish their hair; they were not to suffer any razor to come upon their heads until their vow was accomplished, and then they were to cut it off: *Numb. 6, 18*. But now all Christians have a contrary commandment: *1 Cor. 11, 14*, Doth not nature itself teach you, etc.; it is against the law and dark principles of nature, much more against grace and the word of grace; yea, it is a shame (if persons be not quite past shame) for men to wear long hair. Here is a wide difference between the old Nazarites and students now.

2. The Nazarites did nourish their hair out of obedience unto God and holy devotion, whereas persons in these days do it out of pride, vainglory, effeminacy, and the like sinful motives, and for sinister ends.

3. They only amongst the people of God did nourish it, and none else, therefore this example doth evidently prove that all the rest of God's people in the Old Testament, yea; the priests and Levites, did not nourish their hair. So Christians are now to cut their hair unless they can find anywhere (which was never yet found) that the commandment of the Lord hath allowed it.

4. The Nazarites were to nourish all their hair alike; they were not to cut off some part, and to leave long locks hanging down, as is practised by some nowadays.

5. The Nazarites were to nourish their hair to burn it: *Numb. 6, 18*. But students and ministers and professors in these days nourish their hair to keep them from all diminution—it were much better they were burnt.

6. The Nazarites nourishing of their hair was to difference them from the

common sort; but now the nourishing of the hair is to hold correspondency with ruffians and swaggerers and cavaliers, yea, the vilest persons in the country, yea, Indians and pagans, whose abominable customs the Lord hath forbidden His people to follow: *Levit.* 18, 30.

Objection: It is true that the Lord hath forbidden unto men long hair, but what is long hair? can any man prescribe out of the word of God any set size for men's hair? if this cannot be done, why should any be offended at our hair as if it were long? This objection hath been made by some, and generally stood upon, therefore it is a fit season to give some answer to it.

Answer: 1. This is most clear that long hair (if mankind do wear it) is contrary to the word of God and to nature, and shameful, as was said before.

2. It is no small reproach to the Lord and His word to find fault with long hair, and yet that He should not give us to understand which is long hair, but that every man is left still to his liberty to wear his hair as long as he lists. This makes the trumpet to give an uncertain sound which the Lord approves not.

3. That he that would keep a good conscience in such cases and controversies, wherein there appears any doubt, will make choice of the surer part, that is, that part wherein he may be sure not to sin against the Lord. So will He do in this case about the length of hair; short hair we may be sure will neither offend God nor good men, but long hair may and doth offend both; therefore be sure that God do not account thy hair long.

4. Christians are bound to abstain from all appearance of evil: *1 Thee.* 5, 22.

5. Christians are to do whatsoever is of good report: *Phil.* 4, 8. But long hair in mankind hath great appearance of evil, and is of evil report.

6. All occasions of sin, as lust, pride, ensnaring ourselves and others, should be avoided by Christians: *Jude* 23. But such is wearing of locks, etc.

7. Christians should give no offence to others: *1 Cor.* 10. But this long hair gives offence: (1) As giving an ill example to others, who are often induced by their ill precedent and example to imitate and second them in their guise. Hence it is, that many, even children, will not endure their hair to be cut short, because that such and such professors do wear it long. (2) It animates and confirms others, especially profane ones, in their fantastic dress and nourishing of their hair. (3) It offends and grieves the souls of many devout, religious, and gracious Christians, who do utterly disapprove it and condemn it in their judgments as well as practices.

8. The Scripture seems plainly to prescribe unto men the length of their hair: *Exek.* 44, 20, compared with *Lev.* 19, 27, and 21, 5, 'They shall neither shave their heads, nor suffer their locks to grow long, they only shall poll their heads.' Now everyone understands what is meant by polling of the head: it signifies the cutting of the hair short [here are words illegible, but apparently] and all locks, and to nourish any part thereof is contrary thereunto and to the word of God. But lest I should digress too far, thus I finish this use: Take heed of that fearful threatening: *Psal.* 68, 21, 'God shall wound the hairy scalp of such a one as goes on still in his wickedness.' It is likely that there were some such hairy, wicked scalps and pates in those days as there are in these days.

But consider that God in His due time will wound them.

USE III. This may serve to work thankfulness in parents and in all sorts of people, especially in New England, seeing that the Lord hath bestowed or offered these mercies to us all. He hath raised up of our sons for prophets, that concerns parents, some parents more nearly; and He hath raised up of our young men for Nazarites, that concerns all, and all have, or may have, the benefit of it. For besides the Lord's former mercies, in sending in to us the old stock of faithful ministers, and thrusting out of His laborers into this vineyard (by the blessing of God, upon whose labours the Gospel of Christ, and the powerful dispensation of God's ordinances hath flourished many years, to the admiration of all the Christian world), I say, besides those former mercies, never to be forgotten, the Lord hath graciously super-added this, in raising up not only means for this end (*viz.* : schools of learning), but also from thence some of our sons and young men to be prophets and Nazarites.¹⁸ Is it not so, O ye people of God, in New England? And if it be so, see what the Lord expects at our hands in answerable returns of thankfulness unto Him, and let us weigh seriously these motives to such thankfulness.

Motives for Thankfulness.

1. Let us consider what benefit and comfort all sorts have by it, when as our sons and young men are not only endowed with the seed of knowledge and grace, but such as are sent forth as seedsmen, to sow the Lord's good food in the hearts of others. It was the Lord's blessing of Rachel and Leah that they two built up the house of Israel, that is, the Church of God, by their posterity. For sons to build up our own houses to be Banim and Builders thus according to their name, is a great blessing; but far greater, that they are builders-up of God's Church and house: *Psalm* 144, 12, 15.

It is an happiness for God's people, when they are in such a case, that their sons are as plants grown up in their youth. But much rather to have the Lord for their God, and means to procure and continue so. Is it not so, O ye people of God, in New England?

2. Consider the state of the country where we live, which is such that now the old stock of the country is wellnigh worn out, and there is no likelihood of further supply that way. Now ye know how God's people are fastened here, that if there should not be some supply by schools of learning God's people would soon be left without a teaching ministry, etc., as *2 Chron.* 15, 2. Is it not so, O ye people of New England?

Objection: But may we not be sufficiently supplied from among ourselves by the gifts and endowments of gifted brethren?

Answer: I could wish as Moses, that all God's people were prophets. But you shall find it here, as in other trades, that there is a great difference between those that have been bound apprentices to a trade, and others that are handy and have gotten a little skill by the observation of others. This latter will serve to patch or bungle, but wise men will rather choose to deal with those who have been trained up in such a course. Thus from persons educated in good literature we may rather expect that they should be workmen that need not to be ashamed, etc., as Paul speaks to Timothy: *Iac.* 50, 4, 'They that have had an ear to hear as the learned, are most likely to speak a word in due season to him that is weary,' etc.

3. Consider what helps diverse particular churches have had from these

schools in grievous breaches that have been made in them, when any of the precious servants of God have been taken away from hence, others have stood up in their steads and have made up the breaches comfortably, as it was sometimes said, in the like case, that the sun hath set and yet no night followed. Is it not so, O ye children of my people?

4. Consider that this makes for the continuance of the Church and propagation of religion to after ages. For this was always found true, that where the vision fails, there the people will be made naked: *Pro.* 20, 18, They will be naked congregations, and naked souls, and naked families, and naked posterities. Naked of what? Naked of the righteousness of Christ which is put on by faith, and comes by hearing; and the shame of this nakedness will appear to God and man; naked of the Christian armour to defend themselves from spiritual enemies. And where schools have been put down or ceased, there churches have been unprovided, and religion hath decayed, and great ignorance and errors have succeeded in after ages; but on the contrary, this course of the instruction of youth is the means to provide for present and future times. And why do men plant orchards, or preserve the breed of the best cattle, but to provide for future times? But is not the pure religion of more weight, and the providing for the souls of posterity to the world's end? This is another benefit of worth; is it not, beloved, etc.?

4. Let the separation consider this, some of whom are averse to schools of learning: that schools are available to raise up Nazarites and to further an holy separation, which is commanded unto Christians: *2 Cor.* 6, 10. Is it not so, beloved, etc.?

Consider how the sons of Belial, papists and heretics, they compass sea and land to support and spread and fortify the synagogue of Satan, the dens of devils, and suburbs of hell? Should not the glory of God and the salvation of souls be dearer unto us than their destruction and condemnation is to them? All these things should forward our thankfulness to God for these mercies. But now it is not a verbal thankfulness that will serve our turn (that would be gross hypocrisy), but it must be really expressed towards the education of youth and encouragement of the ministry and the propagation of the Gospel.

The reality of your thankfulness, let it be expressed in your future care:

1. To do (if it be in your power) as Hezekiah did: *2 Chron.* 30, 22, 'That spake to the heart of all the Levites, that taught the good knowledge of the Lord.' Yea, do as Nehemiah did: *Chap.* 13, 11, See that sufficient portions be allotted and contributed unto them.

2. Do as Jehosaphat did: *2 Chron.* 19, 8, Reach forth thine hand to send Levites into the blind and dark places of the country.

3. Be at the cost to train up thy towardly children in good literature. Parents are commanded to train up their children: *Ephes.* 6, 4, In putting understanding and instruction into them; as if children were like brute beasts without it.

4. In relieving the sons of the prophets and the college as Eliha did: *1 Kings* 4, 34, In setting up of free schools¹⁴ as the Lord enables you.

5. If ye be poor, yet pray for prosperity and means of education, and pray for the peace of Jerusalem, and that Bethel, the house of God, may not be turned into Bethaven, the house of iniquity; that schools of learning be not poisoned, or the fountains corrupted.

USE IV. This point may serve for information to teach us that schools of learning are approved and appointed of God, and of great importance for the benefit of God's people. Seeing that the Lord works with, and blesseth this means, for the laying up of provision, and making of supplies for the work of the ministry, and the Lord here reckons it up as the chiefest of all the blessings mentioned. And this was always one way (even when there were extraordinary prophets) of raising up of prophets, etc. And there is much more need of schools now, when those extraordinary prophets are wanting.

Question. What ground is there in the Scripture for schools of learning?

Answer. Give me leave to show this as a matter called by many into question in these days.

Reasons for Schools of Learning.

Now the text and the explication thereof before, shows that the Lord did approve of them in the days of the Old Testament;¹³ that is the intent of the frequent mentioning of the sons of the prophets; that is, their scholars that were trained up under them. Besides 2 *Kings* 22, 14, there is mention of a college (where Huldah, the prophetess, and no doubt many others nurtured in a way of learning lived), and the Hebrews have an usual word whereby they call their schools (Jeshibah), a company of scholars that sit together to be taught; and *Mat.* 2, 12, the master and scholar is made mention of. Now in the New Testament John Baptist had scholars: *John* 1, 28; so the Pharisees had their scholars: *Mat.* 23, 15, 16. Paul was Gamaliel's scholar: *Acts* 22, 3. There was a synagogue of learned men disputing with Stephen: *Acts* 6, 9. So there was a school at Corinth: *Acts* 19, 8. Timothy was Paul's scholar: 2 *Tim.* 3, 14. But the example of our Saviour, Christ, is above all, that kept a school, first of His twelve disciples, then of the seventy disciples: *Luke* 10, that He also sent forth to preach the Gospel.

Yea, there is a most clear and express commandment that Paul gives to Timothy: 2 *Tim.* 2, 2, He saith 'the things that thou hast heard of me before many witnesses, the same commit to faithful men, who shall be able to teach others also.' Where we see that Timothy had many school-fellows that are called witnesses, and also that Timothy is commanded to teach others. So it concerns such as God enables to teach them that may be teachers of others, to instruct them in the things of God.

Objections to Schools of Human Learning.¹⁴

But now it will be very needful upon this occasion for us to consider what weight there is in the objections that divers in these days have printed against them.

Objection: 1. Mr. Dell, in his answer to Mr. S. Simpson, allows schools of the prophets wherein Christian religion is taught, but against schools of human learning; this is that, that makes them Anti-Christ, seeing they are contrary to, and do oppose Christ; 'this makes the universities stews of Anti-Christ, houses of lies, and to stink before God with most loathsome abomination, etc.', with a multitude of other reproachful terms which Luther and others have loaded popish universities withal.

Answer. 1. I do much desire that the opposers of schools and universities would speak plainly what they mean by human learning, then we should

easily come to some conclusion. Therefore, let this distinction be premised: that human learning may either be taken for all that learning that the heathen authors or philosophers have delivered in their writings; or else all other arts besides theology, as they call physics, ethics, politics, etc., take in also the grounds of languages, Latin, Greek, and Hebrew.

Now in the former sense, if Mr. D. do mean by human learning, all that learning that the heathen men have uttered out of the light of nature, it will be a great oversight to pass such a sentence upon it. 1. Because we find in Scripture some testimonies out of human writers, as *TW.* 1, 12; *Acts* 17, 28; *1 Cor.* 15, 23, etc., which the Spirit of God would not have alleged, if their writings had been utterly unlawful to read.

2. There are certain principles of truth written, even in corrupt nature, which heathen authors have delivered unto us, that do not cross the holy writ: *1 Cor.* 11, 14, Doth not nature itself teach you, etc.; and it cannot be denied that all truth, whosoever it be that speaks it, comes from the God of truth, as He is called several times. And who can deny but that there are found many excellent and divine moral truths in Plato, Aristotle, Plutarch, Seneca, etc., and to condemn all pell-mell, will be an hard censure, especially to call universities Anti-christs, for reading of them. Besides, they have treated of the works of God most excellently in many places, and the works of God ought to be declared by parents to their children: *Psal.* 78, 2-6. Besides, they have delivered many excellent sayings of God, and have attested many Scripture histories, as might be showed by several instances out of Justine, Tacitus, etc., and Mr. D. is not ignorant of them. Shall all these be thrown away as anti-christian or as lies?

Objection. But they have much profaneness and filthiness in them, and besides, they are made idols of in our universities, when as *ipse dixit*, and their authority goeth for current, as Scripture itself amongst them.

Answer. But 1. All heathenish writers have not such profaneness in them. 2. Those that have, let them be condemned and abhorred, and let not youth be poisoned by them. 3. Let God be true and every man a liar, and let not man, especially any heathen, be deified, or his authority be accounted on, or go cheek by jowl with the speaking in the Scripture. This is indeed to be abhorred wheresoever it is received, but *abusus non tollit usum*.

(2.) But now if human learning be taken in the second sense, for all those arts that are commonly taught in universities, as physics, ethics, politics, economics, rhetoric, astronomy, etc., or also for learned tongues of Latin, Greek, and Hebrew, etc.

1. I will be bold to affirm that these in the true sense and right meaning thereof are theological and Scripture learning, and are not to be accounted of as human learning. For who can deny that the first and second chapters of Genesis, and many chapters in Job, and the Psalms, and divers other places in holy Scripture, do afford excellent and sure grounds for natural philosophy, and a just system thereof, which Mr. Zanchy, Daneus, and divers other eminent divines have opened and declared unto us?

And where are there to be found such ethical, political, or moral precepts, as are to be found in holy Scriptures; or such principles for the ordering of our lives, families, or common weals? let any man declare unto us. And

where are there such high strains of all sorts of rhetorical tropes and figures to be found in any author, as there are in the writings of the prophets and apostles? And who can imagine but that the best and surest chronology in the world is to be found in holy Scriptures, upon which all the computation of times in all ages of the world depends?

*Admissions in favor of Schools of Learning.*¹⁷

2. Let all judicious men consider what Mr. Dell grants, though he speaks so much against human learning. I will relate his own words, because his books are in few hands, and they that have them build much upon his judgment. He speaks thus in his treatise of the reformation of learning:

"1. I conceive it meet that the civil power or chief magistrate should take great care of the education of youth, as one of the greatest works that concerns them, and one of the worthiest things they can do in the world, inasmuch, that what the youth now is, the whole commonwealth will shortly be.

"2. To this end it is meet that schools (if wanted) be erected through the whole nation, and not only in cities and great towns, but also (as much as may be) in lesser villages; and the authority of the nation take great care that godly men especially have the charge of greater schools; and that the magistrate afford to this work suitable encouragement.

"3. That in cities and greater towns, where are the greater schools and the greater opportunities to send children to them, they teach them also the Latin and Greek tongues, and Hebrew also, which ought to be had in great account with us, for the Old Testament's sake.

"4. It may be convenient, also, that there be some universities and colleges for instructing in the knowledge of the liberal arts, beyond grammar and rhetoric; as in logic, which may be of good use in human things, if reason manage that art of reason. But the mathematics especially are to be had in good esteem in universities, as arithmetic, geometry, geography, and the like, which as they carry no wickedness in them, so are they besides very useful in human societies, and the affairs of this present life. There may be also in the universities and colleges allowed the study of physic and the law, etc.

"5. Why the universities and colleges should be at Cambridge and Oxford, I know no reason; and we judge it most prejudicial to the common good of the commonwealth that these two universities should make a monopoly of human learning to themselves.

"Doubtless it would be more suitable to a commonwealth, and more advantageous to the good of all the people, to have universities or colleges, one at the least in every great town or city in the nation, as in London, York, Bristol, Exeter, Norwich, and the like. And for the state to allow to these colleges an honest and competent maintenance for some godly and learned men to teach the tongues and arts under a due reformation."

Thus much Mr. Dell. By which it appears that multitudes are deceived concerning this. As if Mr. D. did utterly condemn universities or schools of learning, that which is called human learning, seeing that there is no art or tongue studied or taught in colleges, but he allows (though with caution) and also he desires there were more schools, colleges, and universities than there are. Briefly, Mr. Dell's project is this, and so far to be

allowed—to put down heathenish schools (where there be any such) and to erect Christian, as himself speaks, page 19, in his answer to Mr. Simpson.

Objection: But there is no necessity of schools or universities or any human learning to teach men divinity, or to make able preachers of the Gospel. The teaching of the Spirit of God alone is sufficient, which Mr. Dell proves by the examples of our Saviour Christ and His apostles, seeing Christ Himself had only the unction of the Spirit: *Ioa.* 61, 1-4; *Luke* 4; *Mat.* 13, 54, 55. Besides, when He would send forth preachers into all the world, He chose fishermen, publicans, tent-makers, plain men, and of ordinary employment in the world; and only put His Spirit upon them: *Acts* 2, 17. This argument is much stood upon by Mr. Horne and Mr. Crandon against Mr. Baxter.

Answer. 1. It is a marvelous mistake to reason from our Saviour Christ and His apostles to these times; for our Saviour received the Spirit not by measure: *John* 3, 34; and the apostles had the miraculous and visible and extraordinary gifts of the Spirit bestowed on them: *Acts* 2. So the reason will stand thus: If our Saviour Christ and His apostles without other learning, by the miraculous and extraordinary gifts of the Spirit, were enabled and furnished sufficiently for the ministry: then other ministers in after times (that have no such extraordinary gifts) need no other learning, but the unction of the Spirit; as if he should say, if Aholiab and Bezaleel were filled with the Spirit of God in wisdom, and in knowledge, and all manner of workmanship to devise cunning works (as they were: *Exod.* 31, 3, 4), then no man need to be an apprentice to learn any mechanical trade, seeing the teaching of the Spirit is sufficient for any cunning work. Who is there that would not account this reasoning ridiculous? Surely if Mr. Dell had not excluded logic and reason out of divinity he never would have made such collections. It is much like his reasoning in another sermon of his: The Scripture saith that Christ shall baptize with the Holy Ghost, and with fire, therefore there is no baptism with water to be used or to be in force. But, forsooth, whatever he saith, ye must expect no reason from him, ye must take all from him as dictates of the Spirit; and so all ordinances in the Church that the Spirit hath appointed, the Spirit shall also overthrow. Yea, I have no reason why Mr. Dell, or any other believer, upon this ground, may not make another Scripture, for if the same Spirit that indicted or penned the Scripture be in the same or the like measure in Mr. Dell or other believers as it was in the holy men of God and penmen of the Scripture, then what Mr. Dell and any other believers write or say is of equal authority with the canonical Scripture. So, Mr. Dell and every believer is made a Pope, that cannot err, etc. But here I will stop and spare.

2. I affirm, that the Lord Jesus and His apostles were learned, and beyond that which is attainable by ordinary teaching. For our Saviour it is said: *Mat.* 13, 54, 55, 'Jesus came into His own country and taught them in the synagogue, insomuch that they were astonished, and said, whence hath this man this wisdom'; and *John* 7, 15, 'The Jews marvelled at the teaching of our Saviour, saying, how knoweth this man letters (or learning), having never learned them?' Therefore, it is certain that our Saviour had learning, though never trained up therein, and also, that learning and teaching is the ordinary way to attain to learning, yea, such learning as our Saviour manifested in His ministry (as the Jews conceived). So I may say of the apos-

ties, though in a far inferior degree. For with what effusion of the Spirit at Pentecost, they had the gifts of tongues, the gifts of miracles, of discerning of spirits, yea, the gifts of wisdom and knowledge (the pastor's and teacher's gifts), mentioned 1 *Cor.* 12, and also 1 *Cor.* 14. But will any man say that believers now have any such gifts of the Spirit, or any promise thereof? Mr. Dell, in his answer to Mr. Simpson, p. 84, tells us of many promises of the Spirit to believers: 1 *Cor.* 12, 13, *Gal.* 4, 6, 7, whence he gathers, that the whole Church of believers, and every true member thereof, do receive the Spirit of God. And who will deny that they do receive it, to cry Abba father, to change, sanctify, and comfort their hearts? But there is more than these required to make an able minister. God's ministers must rightly divide the word of truth: 2 *Tim.* 2, 15, Must be apt to teach; 1 *Tim.* 3, 2, Must be able by sound doctrine, both to exhort, to convince the gainsayers. They must have the tongue of the learned, that they may not be as those unlearned ones that wrest the Scriptures to their own and others perdition: 2 *Pet.* 3, 16. Now let any prudent man be judge in this case, whether he think that every Christian that hath received the sanctifying Spirit of God is gifted thereby and qualified, for the confutation of gainsayers and the whole work of the ministry.

Mr. Dell, in his answer to Mr. Simpson:

Objection: "Human learning is rather an hindrance than an help to the ministry of the Gospel, and doth rather unfit than fit men for it; and the grace and teaching of God only prepares and enables men to this divine work. Learning is so far from fitting men for this Gospel and the ministry thereof, that indeed there is nothing in greater enmity to Christ crucified, nor more contrary to the Word of the Cross than that. Yea, nothing in all the world hath been such an introducer, favorer, supporter, and enlarger of anti-Christ's kingdom, as human learning and philosophy. This hath brought in all the hypocrisy, superstition, false worship, sects, and schisms, etc.

Answer. It is to be feared that Mr. D. hath been tainted with human learning, as in some other of his opinions, so in writing of these things. Let the reader remember what approbation he gave to human learning before, that he would have it taught, not only in universities, but in all cities and villages; and yet he hath now so forgot himself, that though for humane and civil ends, he did allow it, yet now he saith, *that it is enmity to Christ crucified, and contrary to the word of the cross, etc.*; wherein let the indifferent reader observe with me a few particulars.

1. If Mr. Dell had allowed the use of *Logick* in Divinity, how should he have dared to have allowed any of these humane arts, or languages for any end whatsoever? Paul abhors that charge: *Rom.*, 8, 8. *Let us do evil that good may come of it*, and their damnation is just that so reason. But Mr. D. saith that for humane ends (as for the Commonwealth's sake) *Schools, Universities, Colledges, Grammar, Logick, Physick, Law, Rhetorick, Arithmetick, Geometry*, should be set up in every town and city in the whole nation; which yet are no better than *enmity to Christ crucified and contrary to the word of the cross, the greatest introducers, favourers, supporters, and enlargers of Anti-christs kingdom, which have brought in all the hypocrisie, superstition, false doctrine, false worship, sects, and schisms.*

Is not this to do evil, that good (some outward good to civil society)

may come of it? It is no matter how it fares in the meantime with Christ or Antichrist, Christian or antichristian religion. It is no matter how much hypocrisy, or false doctrine, false worship, etc., be set up thereby, in every city or village in the whole nation, so that their human ends be provided for. Is not this man, think you, a good friend to Christ and Antichrist, to the Church and commonwealth? Doth this doctrine come from the Spirit of God, or another spirit?

2. Anti-Christ himself and his adherents, take in all the rabble of locusts crawling out of the smoke of the bottomless pit, take in all the popish tyrants, and all the devils in hell (for these are all such as are in the world); yet, according to Mr. Dell's divinity, were never such introducers, or favorers, etc., of Antichrist's kingdom, were never such enemies to Christ crucified, or the word of His cross, never brought in so much hypocrisy, superstition, false doctrine, false worship, etc., as human learning, and yet how can he in any sense allow of any human learning, or desire more universities or colleges. Would he have more Antichrist's, more devils, etc.? Hath not that man laid aside natural logic, and common sense, and honesty, and put off his forehead that writes thus?

3. Whereas he saith that human learning is rather a hindrance than an help to the ministry of the Gospel and to all Christianity. Let us consider a little what truth there is in this assertion, to let pass what I said before:

1. I will premise what Mr. Crandon¹⁷ and M. Horn, do grant that were no friends to human learning. Mr. H. grants some lesser usefulness some sciences may afford (to Divinity), as the mathematics to find out the bigness of the ark, the measures of the temple, etc.; Astronomy, to tell us what Arcturus and Orion and Pleiades are; history and chronology may seem to help to understand the passages of the monarchies and visions in Daniel, etc. Thus Horn; but I should have thought that so strict a divine would rather have scrupled the very name of Arcturus and Orion, which, to find out, he must find worse human learning; that is heathenish fables, which will tell of a bear and a bear's tail in heaven, where Arcturus stands, and the constellation of Orion brings in Jupiter, Neptune, and Mercury; how they did *ex urina illum procreare*, and that Diana, for his valor in hunting, carried him up to heaven. To have these and such things brought into the translation of the Scripture would stumble a godly heart that knows the meaning thereof, as the rawest piece of human learning put in for Scripture which Mr. H. swallows. Now let me add what Mr. Crandon's judgment is; he speaks thus in his writings against Mr. Baxter. "That logical, philosophical, and metaphysical argumentations (mark he puts in metaphysics, too, which many will not own for a distinct science) in natural, moral, and economical questions (and these do spread far in divinity, as hath been said before,) may be useful. Yea, logic, in its sober and moderate use, applied as an instrument to assist in the contexture and retexture of Scriptures, to find out the sense and meaning thereof, and farther, as by joining of Gospel positions together, it helpeth elicit sure and sound conclusions,—may be profitably used in evangelical questions." Thus Mr. Crandon, which crosseth Mr. Dell's judgment. Let me add farther:

1. How shall a minister, without the knowledge of the original tongues, either translate the Scriptures or, when they are translated, maintain them

against the popish, vulgar, or other diverse false translations, to be the infallible truth of God? How shall he comfort a poor soul that saith he is a reprobate, and proves it out of 2 Cor. 13, 5, because he knows not that Jesus Christ is in him, if he knows not what *adokimoe* means? I might make innumerable such instances, but I spare.

2. For logic let them tell me what a parologism is: *Sam.* 1, 22, without some knowledge in logic; what *logicon gala* means: 1 Pet. 2, 2. For logician is nowhere used as it is translated (of the word), but *Rom.* 12, 1, It is translated reasonable, and if there be logical and reasonable milk in the Scripture take away logic and reason, and the milk will be turned, neither will it be *adokion* without deceit. Yea, how shall a man know when a Scripture is wrested, or falsely applied, or a false use is made of it, or a false consequence is drawn out of it, or a true, without some principles of logic, especially, to hold forth these things to others, he must needs be a shameful workman, and many times ridiculous, neither rightly apprehending, nor dividing the word of truth, that hath no knowledge how to interpret the Scripture.

3. For rhetoric I would fain have the unlearned minister, or him that understands not rhetoric, to give any tolerable sense of these places of Scripture, and many the like (farther than they have been opened to them by the learned): *John* 15, 1, 'I am the true vine, etc.'; *John* 1, 29, 'Behold the Lamb of God'; 1 Cor. 10, 4, 'The rock was Christ'; *John* 6, 41, 'I am the bread that came down from heaven'; *John* 10, 7, 'I am the door of the sheep, etc.'; add these places: *John* 3, 13, 'No man ascends into heaven but he that came down from heaven, etc.'; 1 *John* 3, 16, 'Hereby perceive we the love of God, because He laid down His life for us'; *John* 21, last, 'There be many things that Jesus did the which, if they should be written every one, I suppose that even the world itself could not contain the books that should be written.' And that *Mat.* 12, 20, 'as Jonas was three days and three nights in the belly of the whale, so shall the Son of Man be three days and three nights in the heart of the earth.' I should be endless if I should enumerate what might be gathered in this case. But I shall here have done with Mr. Dell's arguments.

There is somewhat more in Horn and Crandon, which I shall be brief in, because as they state the question I should not contend with them.

Mr. Horn, thus: "That the study of philosophy (though lawful to be known and, in some points, useful yet,) is not necessary to the preachers or preaching of the Gospel, nor the key of knowledge, without which men cannot understand, or profitably hold forth the truths of Christ to others."

It is not denied but what is necessary to salvation may be both understood and preached without the help of philosophy; it is enough if it be lawful and useful (*ad bene ornelius esse*), which is granted by him.

Now Mr. Cr., in his preface against Baxter, states the question thus: "That human learning is of no force to decide, judge, and conclude anything in questions merely evangelical, such as justification and all other Gospel-graces and privileges." I suppose that Mr. Crandon shall neither have Mr. Baxter nor any Protestant writer his adversary in that assertion. He that shall say otherwise shall make a pope of human learning, and an idol, or set up man above God. But for all this these revered men bring arguments that

go as far in overthrowing all human learning as Mr. Dell hath done. Let me briefly see the strength of them:

Horn. "If philosophy, physics, etc., had been needful for furnishing of men to the Gospel, this Christ, our Saviour, who came to teach us the mind of God and to set on foot the preaching of the Gospel, would have delivered those sciences unto us; at least a more perfect form of them than the philosophers did or could. But He did not so, etc., therefore they are not needful, etc."

Answer. 1. Take the force of this reason, *pari*; thus, If the knowledge of the Greek and Latin languages had been needful for furnishing men the Gospel in all ages, then Christ would have taught those languages, and made grammars for the learning of them, at least in a more perfect form than any grammarians did or could. He hath not done so, therefore, etc., would any wise man think this to be a good consequence? Yet the case is much alike, for both original tongues and the arts and sciences are like preparatives fitting persons to the preaching of the Gospel (for that is meant by furnishing men to the Gospel). But God is pleased to give to the sons of men to be exercised with labor and study in this and other kinds: *Eccles.* 1, 18.

2. Christ hath delivered to us those sciences (as far as is needful) in a more perfect form than any philosopher of old hath done. There was never such a method of physics or natural philosophy as is set down in the order of the works of creation, nor ever such a form of ethics, politics, or economics as He hath delivered in the Decalogue, and His own interpretation thereof, etc.

Horn. "The arts and sciences are of a diverse nature from the Gospel, that being a revelation of redemption and way to salvation for fallen man; philosophy but a purblind speculation about the nature of the creatures, and of God as He stands in relation of a creator and governor of them, etc."

Answer. 1. Not only arts and sciences, but the law, both ceremonial, and moral, and judicial, are of diverse nature from the Gospel, as it is the revelation of redemption, etc. Is all, therefore, superfluous, etc.?

2. Whatsoever is contained in Holy Scripture tends some way or other to the way of salvation for sinful man, and to make the man of God perfect; 2 *Tim.* 3, 16, 17, So doth the knowledge of God's works which are sought out of all them that have pleasure therein; *Psalm* 111, 2, Yea, they all make for the glory of God; *Psalm* 45, 10, And the knowledge of God's works is laid down in Holy Writ, not in a purblind speculation about the creatures, but in a way infallible.

3. Though the Gospel in a strict sense signifies the glad tidings of redemption by Jesus Christ, yet it hath a larger signification sometimes, as *Rom.* 2, 16, wherein the apostle tells us of the day of judgment, in which God shall judge the secrets of men according to the Gospel. There the rule of the last judgment shall be not only the Gospel in a strict sense, but as the law may be also comprehended under it; and whatsoever is contained in the Scriptures of the works of God, and as far as it concerns a minister to preach all profitable and Scripture truths, the knowledge of arts and sciences is useful and expedient to him to hold them forth to his hearers.

Horn. "The law or doctrine of the Lord is perfect for conversion and edification, *Psalm* 19, 7."

Answer. But this perfect doctrine comprehends the doctrine of God's works, which is called philosophy.

Besides, that perfection doth not exclude, but presuppose that same to *gnoston tou theou*; *Rom.* 1, 19, Some common notions concerning God and His works are left in every man still, that must not be extinguished.

Horn. "If the said heathenish sciences are necessary to salvation, then we are not complete in Christ, but the contrary is affirmed, *Col.* 2, 2, 8, 10."

Answer. Heathenish sciences are not necessary to salvation, nor simply to make an able minister. A Christian may be complete in Christ, and a minister an able minister, without them, as the apostles and many others have been. We grant that all the treasures of soul-saving knowledge are in Christ, yet this doth not exclude the expedience of the knowledge of the law, ceremonial or moral (which are mentioned in the same place: *Col.* 2, 14), though we may be complete in Christ without seeking our salvation by them.

Horn. "If we are to beware of philosophy lest we be spoiled by it, then it is not necessary to teach and preserve us. But the former is true, *Col.* 2, 8, and by philosophy the apostle means not only sophistry, but that which the wisest philosophers accounted philosophy."

Answer. 1. No Christian (that I know of) will say that heathenish philosophy is necessary to teach or preserve him or others. 2. What philosophy means he explains, and addeth to philosophy vain deceit, and that is no better than sophistry.

3. There are many false principles of heathenish philosophy, as the eternity of the world, the freedom of the will to goodness, the placing of the chiefest good in contemplation, or in moral virtues—such notions as these will spoil us, and must be shunned. But there are many true principles even amongst the heathens (which the apostle calleth that which is known of God, as His eternal power and Godhead), these will not spoil us.

4. There is nothing so good, no, not the Scriptures themselves, but they may be abused, and it is good counsel to warn men to take heed that they be not spoiled by the Scripture abused; much more may we be warned that we be not spoiled by the philosophy of the heathens.

5. The word (spoiled) by an allegory hath respect to what he spoke before about the treasures of Christ or the word; *vers.* 2, That which robbeth us of these treasures, leaves us but poor creatures, but all philosophical tenets do not this.

6. I deny not but that (as Ames saith, and it is alleged by Mr. Crandon) the schoolmen and popish writers have made a very hodge-podge and mingle-mangle of heathenish philosophy and divinity together, and so brought in many pernicious errors into divinity; and it is likely that the apostle in this place forewarns the faithful to beware of such philosophy, which is called, *Rev.* 2, The depths of Satan. But what is this to the forbidding of sober and Christian philosophy?

What is added more than this by Mr. Horn hath been answered before. Mr. Crandon hath objected another place against secular learning, that is: "*Acts* 19, 19, What is spoken of the converts of Ephesus, while the apostle was yet resident among them, and consequently consenting with them, that they burnt their books of curious arts; which though some would have to be understood of conjuring books, yet I cannot assent to them, because

this cursed, rather than curious art, was proper and almost peculiar to the Eastern people, Jews, Samaritans, Egyptians, and Babylonians, the Greeks very little or not at all studying it, but placing all their wisdom in the arts, and these were Greeks that burnt their books."

Answer. 1. Who ever expounded this place of other than magic books?
2. If they were not magic (for the word is *perierga*, that is, curious and superfluous) could Mr. C. find none such but philosophical books?

It is sure that as the Greeks, some were philosophers, so there were some poets, tragedians and comedians, lyrics, as Aristophanes, Pindar, Sophocles, Euripides; some orators, as Demosthenes, Isocrates, and some physicians, as Galen, Hippocrates, etc.; they might as well be those curious books as the philosophical.

3. If this exposition of Mr. Cr. is true, then it is a Christian duty and a note of a true convert to burn all philosophical books; yea, and in a public manner: which were an hard saying, and I may question whether Mr. Cr. did ever give this evidence of the truth of his conversion.

4. He seems to be greatly deceived in that he restrains that cursed art to those eastern countries, as though that Greece were free from such devilish practices. For the contrary may appear plainly in Julius Pollux,¹ who is both ancient and exact in setting forth the religion of the Grecians in *lib. 1, Cap. 1, par. 18-19*, where he shows that they had their oracles, and spirits that foretold things to come, their debacchantes, and *numine afflato*s inspired by the devil, their raptures and enthusiasms, extasies, furies, their divinations; and where was the Delphic, that is, Apollo's oracle, but amongst them, with which they consulted on all occasions, and for polytheism they worshiped all the heathenish and devil-gods in the world, and no god was unknown to them but the true, which appears by that inscription upon the altar: *Acts 17, 23*, 'To the unknown God;' besides *Acts 16, 16*, etc., ye find mention of a spirit of divination which was called Python (being like the oracle of Apollo, whither all the people came to ask questions), and OBH, or *eggastrimythos*, because the devil filled the bellies of their prophets and prophetesses, and gave the people his answer in filthy manner from thence, and this example is rather to be noted, because when the Damsel was dispossessed by the apostles, her masters were so enraged, and made their complaint to the magistrates, they put the apostles in prison for it, whence it appears that all sorts, both of magistrates and people among them, favored and maintained such devilish practices. And also the like may be noted: *Acts 17, 22*, where Paul saith of the Athenians, that they were in all things *deisidaimonesteroi*, fearing and worshiping demons, or devils, and false gods. So that the devil must needs have great power over them. But thus much shall serve for answer to Mr. Crandon, the rest that he brings is either answered before, or toucheth not this controversy.

To the only wise God be all glory forever.

FINIS.

PESTALOZZI AND PESTALOZZIANISM.

LAST WORDS.

We shall close our editorial studies and publications respecting the great Swiss educator with this, and possibly one additional chapter in the current volume of the Journal. The articles which follow will amply repay the closest attention.

The first gives an interesting picture of the daily life of Pestalozzi's Family School in the old castle of Yverdon, at a time when his reputation had drawn together pupils and assistants from every nation in Europe. In spite of the unappreciative spirit of the writer, and the evidence of the astounding incapacity of the principal for the administration of affairs, we see and feel the strength and warmth of his great heart which brought and kept together such widely differing antagonisms,—of his constant forgetfulness of self in his immense devotion to the interests of his fellowmen,—and of his insight into the true philosophy and means of human culture, without the trained faculties in himself, the result of his own imperfect education, to perfect and apply the methods.

The second article gives us at once an appreciative account of the principles of the Pestalozzian system, by one competent to understand it, and at the same time gives us the first glimpses of the *Kinderzarten*, as it revealed itself to Froebel in his profound study of the child at play and in school.

The third article, in the list of over three hundred distinct treatises on Pestalozzi and his system, and which is far from being complete, shows both the originality and value of his views, so largely and variously discussed, and opens up a rich field of special study to the student of human culture.

These and other papers, published in the early volumes of the *American Journal of Education*, will appear in a separate volume (the contents of which is given on the next page), as soon as there is any evidence that a revised edition is wanted.

HENRY BARNARD.

HARTFORD, CONN., March 15, 1881.

PESTALOZZI AND SWISS PEDAGOGY.—Memoir and Educational Principles of John Henry Pestalozzi, with Biographical Sketches of other eminent Swiss Educators, and some account of Swiss Pedagogy in other Countries. Edited by Henry Barnard, LL.D. Revised Edition, 736 pages. \$3.50 in cloth binding.

CONTENTS.

INTRODUCTION,	1-48
1. PEDAGOGY OF MONASTIC INSTITUTIONS,	7
2. PLATTER, ZWINGLE, AND CALVIN,	18
3. ROUSSEAU AND MODERN PEDAGOGY,	17
I. JOHN HENRY PESTALOZZI,	49-160
1. Childhood and Youth, 1746-1767,	49
2. Agricultural and Educational Experiments,	56
3. The Evening Hour of a Hermit, 1780,	59
4. Leonard and Gertrude, 1781,	62
5. Life and Writings between 1781-1798,	65
6. Experience at Stanz, 1798,	68
7. Institution at Burgdorf, with Krusl, Bus, and Tobler,	72
8. Experience at Buchsee, 1804,	87
9. Pestalozzian Institution at Yverdon,	87
10. Last Years, 1815 to 1827,	114
11. List of Publications, and Pestalozzian Literature,	127
12. Celebration of One Hundredth Birthday,	145
II. ASSISTANTS OF PESTALOZZI,	155-234
HERMANN KRUSI—JOHANNES BUES—JOSEPH SCHMEID—JOHN TOBLER,	161-205
JOHN RAMSAUER—JOHANNES NEIDERER—HANS GEORGE NAGEL,	217-221
III. PESTALOZZI, FELLEBERG, AND WHERLI,	225-352
1. PHILIP EMANUEL VON FELLEBERG,	225
Educational Establishment at Hofwyl—Principles of Education,	229
Described by Visitors, 1810,—Reminiscences of a Student, 1821,	241-253
2. JACOB WHERLI,	273
Poor School at Hofwyl—Normal School at Krutzlingen,	281
3. THE INDUSTRIAL ELEMENT IN EDUCATION,	289
IV. PESTALOZZI AND FROEBEL,	305-368
1. LETTER OF FREDERICH FROEBEL ON PESTALOZZI'S SYSTEM,	305
2. PESTALOZZI'S MOTHER'S SCHOOL AND FROEBEL'S KINDERGARTEN,	353
V. FATHER GIRARD AND OTHER SWISS EDUCATORS,	369-384
ZELLER—KURATLI—AGASSIZ, and others,	389
VI. SWISS PEDAGOGY IN OTHER COUNTRIES,	385-512
1. PESTALOZZI IN THE LITERATURE OF THE WORLD,	385
2. PESTALOZZI AND THE POPULAR SCHOOL OF GERMANY,	401
3. PESTALOZZIANISM IN FRANCE,	429
4. PESTALOZZIANISM IN GREAT BRITAIN,	437
5. PESTALOZZIANISM IN THE UNITED STATES,	453
6. INFLUENCE ON POPULAR MUSIC,	483
7. INFLUENCE ON SCHOOLS OF AGRICULTURE AND THE ARTS,	489
8. LOUIS AGASSIZ IN THE UNITED STATES,	497
VII. SELECTIONS FROM THE PUBLICATIONS OF PESTALOZZI,	513-735
1. LEONARD AND GERTRUDE; A BOOK FOR THE PEOPLE,	511
Translated from Original Edition of 1781,	521
School at Bonnal,	555
2. CHRISTOPHER AND ALICE, 1782,	565
School and Home Education Combined,	567
3. HOW GERTRUDE TEACHES HER CHILDREN,	593
(1) Pestalozzi's Record of his Educational Experience,	571
(2) Methods of Elementary Instruction,	575
Sound and Speech—Form—Geometry—Drawing—Number,	577
4. A CHRISTMAS EVE DISCOURSE,	703
Delivered to his Family School in 1810,	702
5. NEW YEAR'S ADDRESS, 1809,	712
6. SEVENTY-SECOND BIRTHDAY,	714
7. PATERNAL INSTRUCTIONS,	730
Bequest of Father Pestalozzi to his Pupils,	735
8. THE EVENING HOUR OF A HERMIT,	751
Key to Pestalozzi's Educational Labors—1780,	753
INDEX,	754

Subscriptions, payable on notice by Postal that the volume is ready for delivery, will be received by **HENRY BARNARD, 28 Main Street, Hartford, Conn.**

STUDENT LIFE AT YVERDUN UNDER PESTALOZZI.

REMINISCENCES OF A WESTMINSTER BOY.

THE REMINISCENT.*

The writer of these reminiscences of his student life at Yverdun [about 1814] was taken by his father from the hard forms and birchen discipline of Westminster School, then under Dr. Page, under somewhat exaggerated expectations of Pestalozzi's Boarding School, which are well described by himself.

"Here was a school composed of boys gathered from all parts of the habitable globe, where each, by simply carrying over a little of his mother tongue, might, in a short time, become a youthful Mezzofante, and take his choice of many in return; a school which, wisely eschewing the routine service of books, suffered neither dictionary, gradus, grammar, nor spelling-book to be even seen on the premises; a school for morals, where, in educating the head, the right training of the heart was never for a moment neglected; a school for the progress of the mind, where much discernment, blending itself with kindness, fostered the first dawnings of the intellect, and carefully protected the feeble powers of memory from being overtaxed—where delighted Alma, in the progress of her development, might securely enjoy many privileges and immunities wholly denied to her at home—where even philosophy, stooping to conquer, had become *sportive* the better to *persuade*; where the poet's vow was actually realized—the bodily health being as diligently looked after as that of the mind or the affections; lastly, where they found no fighting nor bullying, as at home, but agriculture and gymnastics instituted in their stead." To such encomiums on the school were added, and with more justice and truth, a commendation on old Pestalozzi himself, the real liberality of whose sentiments, and the overflowings of whose paternal love, could not, it was argued, and did not, fail to prove beneficial to all within the sphere of their influence. The weight of such supposed advantages turned the scale for not a few just entering into the pupillary state, and settled their future destination.

The account which follows, after due allowance for its unsympathizing tone, throws much light on the internal economy of the institution.

INTERNAL CONDITION.

The Pension, during the period of our sojourn at Yverdun, contained about a hundred and eighty élves, natives of every European and of some Oriental states, whose primitive mode of distribution into classes, according to age and acquirements, during school hours, was completely changed in play-time, when the boys, finding it easier to speak their own tongue than to acquire a new one,

* From an article in Blackwood's Magazine for July, 1840, with the caption *Pestalozziana*—written some thirty years after leaving Yverdun, with no prejudices in favor of popular education.

divided themselves into separate groups according to their respective nations. The English would occasionally admit a German or a Prussian to their coterie; but that was a favor seldom conferred upon any other foreigner; for the Spaniards, who were certainly the least well-conducted of the whole community, did not deserve it; among them were to be found the litigious, the mischief-makers, the quarrellers, and—for, as has been hinted, we were not all honest—the exceptional thieves. The Italians we could never make out, nor they us: we had no sympathy with Pole or Greek; the Swiss we positively did not like, and the French just as positively did not like us; so how could it be otherwise? The ushers, for the most part trained up in the school, were an obliging set of men, with little refinement, less pretension, and wholly without learning. A distich from Crabbe describes them perfectly—

"Men who, 'mid noise and dirt, and play and prate,
Could calmly mend the pen and wash the slate."

Punishments were rare; indeed, flogging was absolutely prohibited; and the setting an imposition would have been equally against the *genius loci*, had lesson-books existed out of which to beat it afterwards. A short imprisonment in an unfurnished room—a not very formidable black hole—with the loss of a *goutte* now and then, and at very long intervals, formed the mild summary of the penal "code Pestalozzi."

It was Saturday, and a half-holiday, when we arrived at Yverdan, and oh the confusion of tongues which there prevailed! All Bedlam and Parnassus, let loose to rave together, could not have come up to that diapason of discords with which the high corridors were ringing, as, passing through the throng, we were conducted to the venerable head of the establishment in his private apartments beyond. In this gallery of mixed portraits might be seen long-haired, high-born, and high-check-boned Germans; a scantling of French *gamins* much better dressed; some dark-eyed Italians; Greeks in most foreignering attire; here and there a fair ingenuous Russian face; several swart, sinister-looking Spaniards, models only for their own Caravaggio; some dirty specimens of the universal Pole; one or two unmistakable English, ready to shake hands with a compatriot; and Swiss from every canton of the Helvetic confederacy. To this promiscuous multitude we were shortly introduced, the kind old man himself taking us by the hand, and acting as master of the ceremonies. When the whole school had crowded round to stare at the new importation, "Here," said he, "are four English boys come from their distant home, to be naturalized in this establishment, and made members of our family. Boys, receive them kindly, and remember they are, henceforth your brothers." A shout from the crowd proclaiming its ready assent and cordial participation in the adoption, nothing remained but to shake hands *d'Anglaise*, and to fraternise without loss of time. The next day being Sunday, our skulls were craniologically studied by Herr Schmidt, the head usher; and whatever various bumps or depressions phrenology might have discovered thereon were all duly registered in a large book. After this examination was concluded, a week's furlough was allowed, in order that Herr Schmidt might have an opportunity afforded him of seeing how far our real character squared with phrenological observation and measurement, entering this also into the same ledger as a note.

What a contrast were we unavoidably drawing all this time between Yverdan and Westminster, and how enjoyable was the change to us! The reader will please to imagine, as well as he can, the sensations of a lately pent-up chrysalis,

on first finding himself a butterfly, or the not less agreeable surprise of some newly metamorphosed tadpole, when, leaving his associates in the mud and green slime, he floats at liberty on the surface of the pool, endowed with lungs and a voice,—if he would at all enter into the exultation of our feelings on changing the penitential air of Millbank for the fresh mountain breezes of the Pays de Vaud. It seemed as if we had—nay, we had actually entered upon a new existence, so thoroughly had all the elements of the old been altered and improved. If we looked back, and compared past and present experiences, there, at the wrong end of the mental telescope, stood that small dingy house, in that little mis-clept Great Smith Street, with its tiny cocoon of a bed-room, whilom our close and airless prison; here, at the other end, and in immediate contact with the eye, a noble chateau, full of roomy rooms, enough and to spare. Another retrospective peep, and *there* was Tothill Fields, and its seedy cricket-ground; and *here*, again, a level equally perfect, but carpeted with fine turf, and extending to the margin of a broad, living lake, instead of terminating in a nauseous duck pond; while the cold, clammy cloisters adjoining Dean's Yard were not less favorably replaced by a large, open, airy play ground, intersected by two clear trout-streams—and a sky as unlike that above Bird Cage Walk as the interposed atmosphere was different; whilst, in place of the startling, discordant *Kelchmats* of barges, joined to the creaking, stunning noise of commerce in a great city, few out-of-door sounds to meet our ear, and these few, with the exception of our own, all quiet, pastoral, and soothing, such as, later in life, make

"Silence in the heart

For thought to do her part."

and which are not without their charm, even to him "who whistles as he goes, for want of thought." No wonder, then, if Yverdun seemed Paradisaical in its landscapes. Nor was this all. If the views outside were charming, our domestic and social relations within doors were not less pleasing. At first, the unwelcome vision of the *late* head-master would sometimes haunt us, clad in his flowing black D.D. robes—"tristis severitas in vultu, atque in verbis fides," looking as if he intended to flog, and his words never belying his looks. That terrible Olympian arm, raised and ready to strike, was again shadowed forth to view; while we could almost fancy ourselves once more at that judicial table, one of twenty boys who were to draw lots for a "hander." How soothingly, then, came the pleasing consciousness, breaking our reverie, that a very different person was *now* our head-master—a most indulgent old man whom we should meet ere long, with hands uplifted, indeed, but only for the purpose of clutching us tight while he inflicted a salute on both cheeks, and pronounced his affectionate *guten morgen, liebes kind*, as he hastened on to bestow the like fatherly greeting upon every pupil in turn.

THE DORMITORY.

The sleeping apartments at the chateau occupied three of the four sides of its inner quadrangle, and consisted of as many long rooms, each with a double row of windows; whereof one looked into the aforesaid quadrangle, while the opposite rows commanded, severally, views of the garden, the open country, and the Grande Place of the town. They were accommodated with sixty uncurtained stump bedsteads, fifty-nine of which afforded *gîte* to a like number of boys; and one, in no respect superior to the rest, was destined to receive the athletic form of Herr Gottlieb, son-in-law to Vater Pestalozzi, to whose partic-

ular charge we were consigned during the hours of the night. These bed-rooms, being as lofty as they were long, broad, and overfurnished with windows, were always ventilated; but the in-draught of air, which was sufficient to keep them cool during the hottest day in summer, rendered them cold, and sometimes very cold, in the winter. In that season, accordingly, especially when the *bise* blew, and hail and sleet were battering against the casements, the compulsory rising to class by candle-light was an ungenial and unwelcome process; for which, however, there being no remedy, the next best thing was to take it as coolly, we were going to say—that of course—but, as patiently as might be. The disagreeable anticipation of the *réveil* was frequently enough to scare away sleep from our eyes a full hour before the command to jump out of bed was actually issued. On such occasions we would lie awake, and, as the time approached, begin to draw in our own breath, furtively listening, not without trepidation, to the loud noise of a distant comrade, lest its fitful stertor should startle another pair of nostrils, on whose repose that of the whole dormitory depended. Let Æolus and his crew make what tumult they liked inside or outside the castle—they disturbed nobody's dreams—they never murdered sleep. Let them pipe and whistle through every key-hole and crevice of the vast *enceinte* of the building—sigh and moan as they would in their various imprisonments of attic or corridor; howl wildly round the great tower, or even threaten a forcible entry at the windows, nobody's ears were scared into unwelcome consciousness by sounds so familiar to them all. It was the expectation of a blast louder even than theirs that would keep our eyes open—a blast about to issue from the bed of Herr Gottlieb, and thundering enough, when it issued, to startle the very god of winds himself! Often, as the dreaded six A.M. drew nigh, when the third quarter past five had, ten minutes since, come with a sough and a rattle against the casements, and still Gottlieb slept on, we would take courage, and begin to dream with our eyes open, that his slumbers might be prolonged a little; his face, turned upwards, looked so calm, the eyes so resolutely closed—every feature so perfectly at rest. It could not be more than five minutes to six—might not he who had slept *so long*, for once *oversleep*, himself? NEVER! However placid those slumbers might be, they invariably forsook our “unwearied one” just as the clock was on the point of striking six. To judge by the rapid twitchings—they almost seemed galvanic—first of the muscles round the mouth, then of the nose and eyes, it appeared as though some ill-omened dream, at that very nick of time, was sent periodically, on purpose to awaken him; and, if so, it certainly never returned *απακτος*. Gottlieb would instantly set to rubbing his eyes, and as the hour struck, spring up wide awake in his shirt sleeves—thus destroying every lingering, and, as it always turned out, ill-founded hope of a longer snooze. Presently we beheld him jump into his small-clothes, and, when sufficiently attired to be seen, unlimber his tongue, and pour forth a rattling broadside—*Auf, kinder! Schwind!*—with such precision of delivery, too, that few sleepers could turn a deaf ear to it. But lest any one should still lark under his warm coverlet out of earshot, at the further end of the room, another and a shriller summons to the same effect once more shakes the walls and windows of the dormitory. Then every boy knew right well that the last moment for repose was past, and that he must at once turn out shivering from his bed, and dress as fast as possible; and it was really surprising to witness how rapidly all could huddle on their clothes under certain conditions of the atmosphere!

In less than five minutes the whole school was dressed, and Gottlieb, in his sounding shoes, having urged the dilatory with another admonitory *schwind!* has departed, key and candle in hand, to arouse the remaining sleepers, by ringing the "Great Tom" of the chateau. So cold and cheerless was this matutinal summons, that occasional attempts were made to evade it by simulated headache, or, without being quite so specific, on the plea of general indisposition, though it was well known beforehand what the result would be. Herr Gottlieb, in such a case, would presently appear at the bedside of the delinquent patient, with very little compassion in his countenance, and in a business tone, proceed to inquire from him, Why not up?—and on receiving for reply, in a melancholy voice, that the would-be invalid was *sehr krank*, would instantly pass the word for the doctor to be summoned. That doctor—we knew him well, and every truant knew—was a quondam French army surgeon—a sworn disciple of the Broussais school, whose heroic remedies at the chateau resolved themselves into one of two—i.e. a starve or a vomit, alternately administered, according as the idiosyncrasy of the patient, or as this or that symptom turned the scale, now in favor of storming the stomach, now of starving it into capitulation. Just as the welcome hot mess of bread and milk was about to be served to the rest, this dapper little Sangrado would make his appearance, feel the pulse, inspect the tongue, ask a few questions, and finding, generally, indications of what he would term *une légère gastrite*, recommend *diète absolue*; then prescribing a mawkish *tisane*, composed of any garden herbs at hand, and pocketing lancets and stethoscope, would leave the patient to recover *sans calomel*—a mode of treatment to which, he would tell us, we should certainly have been subjected in our own country. Meanwhile, the superiority of his plan of treatment was unquestionable. On the very next morning, when he called to visit his *cher petit malade*, an empty bed said quite plainly, "Very well, I thank you, sir, and in class." But these feignings were comparatively of rare occurrence, in general, all rose, dressed, and descended together, just as the alarm bell had ceased to sound; and in less than two minutes more all were assembled in their respective class-rooms. The rats and mice, which had had the run of these during the night, would be still in occupation when we entered; and such was the audacity of these vermin that none cared *alone* to be the first to plant a candle on his desk. But, by entering *en masse*, we easily routed the *Rodentia*, whose forces were driven to seek shelter behind the wainscot, where they would scuffle, and gnaw, and scratch, before they finally withdrew, and left us with blue fingers and chattering teeth to study to make the best of it. Uncomfortable enough was the effort for the first ten minutes of the session; but by degrees the hopes of a possible warming of hands upon the surface of the Dutch stoves after class, if they should have been lighted in time, and at any rate the certainty of a hot breakfast, were entertained, and brought their consolation; besides which, the being up in time to welcome in the dawn of the dullest day, while health and liberty are ours, is a pleasure in itself. There was no exception to it here; for when the darkness, becoming every moment less and less dark, had at length given way, and melted into a gray gloaming, we would rejoice, even before it appeared, at the approach of a new day. That approach was soon further heralded by the fitful notes of small day-birds chirping under the leaves, and anon by their sudden dashings against the windows, in the direction of the lights not yet extinguished in the class-rooms. Presently the pigs were heard rejoicing and contending over their fresh wash; then the

old horse and the shaggy little donkey in the stable adjoining the styes, knowing by this stir that their feed was coming, snorted and brayed at the pleasant prospect. The cocks had by this time roused their sleepy sultanas, who came creeping from under the barn-door to meet their lords on the dunghill. Our peacock, to satisfy himself that he had not taken cold during the night, would scream to the utmost pitch of a most discordant voice; then the prescient goats would bleat from the cabins, and plaintively remind us that, till their door is unpadlocked, they can get no prog; then the punctual magpie, and his friend the jay, having hopped all down the corridor, would be heard screaming for broken victuals at the school-room door, till our dismissal bell, finding so many other tongues loosened, at length wags its own, and then for the next hour and a half all are free to follow their own devices. Breakfast shortly follows; but, alas! another cold ceremony must be undergone first. A preliminary visit to pump court, and a thorough ablution of face and hands, is indispensable to those who would become successful candidates for that long-anticipated meal. This bleaching process, at an icy temperature, was never agreeable; but when the pipes happened to be frozen—a contingency by no means unfrequent—and the snow in the yard must be substituted for the water which was not in the pump, it proved a difficult and sometimes a painful business; especially as there was always some uncertainty afterwards, whether the chilblained paws would pass muster before the inspector-general commissioned to examine them—who, utterly reckless as to how the boys might “be off for soap,” and incredulous of what they would fain attribute to the adust complexion of their skin, would require to have that assertion tested by a further experiment at the “pump head.”

THE REFECTORY.

“Forbear to scoff at woes you cannot feel,
Nor mock the misery of a stinted meal.”—CHAMBER.

The dietary tables at the chateau, conspicuous alike for the paucity and simplicity of the articles registered therein, are easily recalled to mind. The fare they exhibited was certainly *coarse*—though, by euphemism, it might have been termed merely *plain*—and spare withal. The breakfast would consist of milk and water—the first aqueous enough without dilution, being the produce of certain ill-flavored kine, whose impoverished lacteals could furnish out of their sorry fodder no better supplies. It was London sky-blue, in short, but not of the Alderney dairy, which was made to serve our turn at Tyverdun. This milk at seven in summer, and at half-past seven in winter, was transferred boiling, and as yet unadulterated, into earthenware mixers, which had been previously half-filled with hot water from a neighboring kettle. In this half-and-half state it was baled out for the assembled school into a series of pewter platters, ranged along the sides of three bare deal boards, some thirty feet long by two wide, and mounted on trossels, which served us for tables. The ministering damsels were two great German Fraus, rejoicing severally in the pleasing names of Gretchen and Bessie. When Fran Gretchen, standing behind each boy, had dropped her allowance of milk over his right shoulder—during which process there was generally a mighty clatter for full measure and fair play—the other Frau was slicing off her slices of bread from a brown loaf a yard long, which she carried under her arm, and slashed clean through with wonderful precision and address. It was now for all those who had saved pocket-money for *menus-*

plaisirs to produce their *cornets* of cinnamon or sugar, sprinkle a little into the milk, and then fall to sipping and munching with increased zest and satisfaction. So dry and chaffy was our *pain de ménage* that none ventured to soak it entire, or at once, but would cut it into *frustrums*, and retain liquid enough to wash down the boluses separately. In a few minutes every plate was completely cleaned out and polished; and the cats, that generally entered the room as we left it, seldom found a drop with which they might moisten their tongues, or remove from cheeks and whiskers the red stains of murdered mice on which they had been breaking their fast in the great tower. So much for the earliest meal of the day, which was to carry us through five hours, if not of laborious mental study, at least of the incarceration of our bodies in class, which was equally irksome to them as if our minds had been hard at work. These five hours terminated, plates were once more insalivated and put by clean, and the hungry garrison began to look forward to the pleasures of the noon-day repast. The same bell that had been calling so often to class would now give premonitory notice of dinner, but in a greatly changed tone. In place of the shrill snappish key in which it had all the morning jerked out each short unwelcome summons from lesson to lesson, as if fearful of ringing one note beyond the prescribed minute, it now would take time, vibrate far and wide in its cage, give full scope to its tongue, and appear from the loud increasing swell of its prolonged eye, to announce the message of good cheer like a herald conscious and proud of his commission. Ding-dong!—come along! Dinner's dishing!—ding-dong! *Da capo* and *encore*! Then, starting up from every school-room form throughout the chateau, the noisy boys rushed pell-mell, opened all the doors, and, like emergent bees in quest of honey, began coursing up and down right busily between the *salle-d-manger* and the kitchen—snuffing the various aromas as they escaped from the latter into the passage, and inferring from the amount of exhaled fragrance the actual progress of the preparations for eating. Occasionally some “sly Tom” would peep into the kitchen, while the Frans were too busy to notice him, and watch the great cauldron that had been milked dry of its stores in the morning, now discharging its aqueous contents of a much-attenuated *bouillon*—the surface covered with lumps of swimming bread, thickened throughout with a hydrate of potatoes, and colored with coarse, insipid carrots, which certainly gave it a savory appearance. It was not good broth—far from it, for it was both *sub-greasy* and *super-salted*; but then it was hot, it was thick, and there was an abundant supply. It used to gush, as we have said, from the great stop-cock of the cauldron, steaming and sputtering, into eight enormous tureens. The shreds of beef, together with whatever other solids remained behind after the fluid had been drawn off, were next fished up from the abyss with long ladles, and plumped into the decanted liquor. The young *gastronome* who might have beheld these proceedings would wait till the lid was taken off the *sour kraut*; and then, the odor becoming overpoweringly appetizing, he would run, as by irresistible instinct, into the dining-room, where most of the boys were already assembled, each with a ration of brown bread in his hand, and ready for the Frans, who were speedily about to enter. The dinner was noisy and *ungentled* in the extreme—how could it be otherwise? *ventre affamé n’a point d’oreilles*. Hardly was the German grace concluded, and the covers removed, when that bone of contention, the marrow bone, was caught up by some big boy near the top of the table, and became the signal for a general row. All in his neighborhood would call out second, third, fourth,

fifth, etc., for said bone; and thus it would travel from plate to plate, yielding its contents freely to the two or three first applicants, but wholly inadequate—unless it could have resolved itself altogether into marrow—to meet all the demands made upon its stores. Then arose angry words of contention, which waxed hot as the marrow waxed cold, every candidate being equally vociferous in maintaining the priority of his particular claim. Earnest appeals in German, French, Spanish, English, etc., were bandied from one to the other in consequence, as to who had really said *après toi* first! At last the “dry bone” was found undeserving of further contention; and, ceasing to drop any more fatness upon any boy’s bread, the competition for it was dropped too. When now we had half filled our stomachs with a soup which few physicians would have withheld from their fever patients on the score of its strength, we threw in a sufficiency of bread and *saur kraut* to absorb it; and, after the post prandial German grace had been pronounced, the boys left the table, generally with a saved crust in their pockets, to repair to the garden and slich—if it was sliching—an alliacious dessert from the beds, which they washed in the clear stream, and added, without fear of indigestion, to the meal just concluded within the chateau. Most of us throve upon this Spartan diet; but some delicate boys, unendowed with the ostrich power of assimilation usual at that period—for boys, like ostriches, can digest almost anything—became deranged in their chylipoietics, and continued to feel its ill effects in mesenteric and other chronic ailments for years afterwards. An hour was given for stomachs to do their work, before we re-assembled to ours in the class-room. At half-past four precisely, a *gouté* was served out, which consisted of a whacking slice of bread, and either a repetition of the morning’s milk and water, or *café au lait*, (without sugar “*bien entendu*,”) or twenty-five walnuts, or a couple of ounces of strong-tasted *gruyère*, or a plateful of *schnitz* (cuttings of dried apples, pears, and plums). We might choose any one of these several dainties we liked, but not more. Some dangerous characters—not to be imitated—would occasionally, while young Frau Schmidt stood doling out the supplies from her cupboard among the assembled throng, make the disingenuous attempt to obtain cheese with one hand and *schnitz* with the other. But the artifice, we are happy to say, seldom succeeded; for that vigilant lady, quick-eyed and active, and who, of all things, hated to be imposed upon, would turn round upon the false claimant, and bid him hold up both his hands at once—which he, ambidexter as he was, durst not do, and thus he was exposed to the laughter and jeers of the rest. At nine the bell sounded a feeble call to a *soi-disant* supper; but few of us cared for a basin of *tisane* under the name of lentil soup—or a pappy potato, salted in the boiling—and soon after we all repaired to our bed-rooms—made a noise for a short time, then undressed, and were speedily asleep under our *duvets*, and as sound, if not as musical, as tops.

Our common fare, as the reader has now seen, was sorry enough; but we had our Carnival and gala days as well as our Lent. Vater Pestalozzi’s birthday, in summer, and the first day of the new year, were the most conspicuous. On each of these occasions we enjoyed a whole week’s holiday; and as these were also the periods for slaughtering the pigs, we fed (twice a year for a whole week!) upon black puddings and pork *à discretion*, qualified with a sauce of beet-root and vinegar, and washed down with a fluid really like small beer.

CLASSES.

The school-rooms, which lay immediately under the dormitories on the ground-floor, consisted of a number of detached chambers, each of which issued

upon a corridor. They were airy—there was plenty of air at Yverdun—and lofty as became so venerable a building; but they were unswept, unscrubbed, peeled of their paint, and, owing to the little light that could find its way through two very small windows punched out of the fortress walls, presented, save at mid-day, or as the declining sun illumined momentarily the dark recess, as comfortless a set of interiors as you could well see. It required, indeed, all the elasticity of youth to bear many hours' daily incarceration in such black-holes, without participating in the pervading gloom. Such dismal domiciles were only fit resorts for the myopic bat, who would occasionally visit them from the old tower; for the twilight horde of cockroaches, which swarmed along the floor, or the eight-eyed spiders who colonized the ceiling. The tender sight, too, of a patient just recovering from ophthalmia would here have required no factitious or deeper shade—but merits like these only rendered them as ungenial as possible to the physiology and feelings of their youthful occupants. If these apartments looked gloomy in their dilapidations and want of sun, the somber effect was much heightened by the absence of the ordinary tables and chairs, and whatever else is necessary to give a room a habitable appearance. Had an appraiser been commissioned to make out a complete list of the furniture and the fixtures together, a mere glance had sufficed for the inventory. In vain would his practiced eye have wandered in quest of themes for golden sentences, printed in such uncial characters that all who run may read; in vain for the high-hung well-backed chart, or for any pleasing pictorial souvenirs of *Æop* or the Ark,—neither these nor the long "colored Stream of Time," nor formal but useful views in perspective, adorned our sorry walls. No old mahogany case clicked in a corner, beating time for the class, and the hour upstriking loud that it should not be defrauded of its dues. No glazed globe, gliding round on easy axis, spun under its brassy equator to the antipodes on its sides being touched. No bright zodiac was there to exhibit its cabalistic figures in pleasing arabesques. In place of these and other well-known objects, here stood a line of dirty, much inked desks, with an equally dirty row of attendant forms subjacent alongside. There was a scantling—it seldom exceeded a leash—of rickety rush-bottom chairs distributed at long intervals along the walls; a coal-black slate pegged high on its wooden horse; a keyless cupboard, containing the various implements of learning, a dirty duster, a pewter plate with cretaceous deposits, a slop-basin, and a ragged sponge;—and then, unless he had included the cobwebs of the ceiling, (not usually reckoned up in the furniture of a room,) no other moveables remained. One conspicuous fixture, however, there was, a gigantic Dutch stove. This lumbering parallelogram, faggot-fed from the corridor behind, projected several feet into the room, and shone bright in the glaze of earthenware emblazonments. Around it we would sometimes congregate in the intervals of class: in winter to toast our hands and hind-quarters, as we pressed against the heated tiles, with more or less vigor according to the fervency of the central fire; and in summer either to tell stories, or to con over the pictorial History of the Bible, which adorned its frontispiece and sides. We cannot say that every square exactly squared with even our schoolboy notions of propriety in its mode of teaching religious subjects; there was a Dutch quaintness in the illustrations, which would sometimes force a smile from its simplicity, at others shock, from its apparent want of decorum and reverence. Pre-eminent of course among the gems from Genesis, Adam and Eve, safe in innocence and "naked truth,"

here walked unscathed amidst a menagerie of wild beasts—*there*, dressed in the costume of their fall, they quitted Eden, and left it in possession of tigers, bears, and crocodiles. Hard by on a smaller tile, that brawny “knave of clubs,” Cain, battered down his brother at the altar; then followed a long picture-gallery of the acts of the patriarchs, and another equally long of the acts of the apostles. But, queer as many of these misconceptions might seem, they were nothing to the strange attempts made at dramatizing the *parables* of the New Testament—e. g. a stout man, staggering under the weight of an enormous beam which grows out of one eye, employs his fingers, assisted by the other, to pick out a black speck from the cornea of his neighbor. Here, an unclean spirit, as black as any sweep, issues from the mouth of his victim, with wings and a tail! Here again, the good Samaritan, turbaned like a Turk, is bent over the waylaid traveler, and pours wine and oil into his wounds from the mouths of two Florence flasks; there, the grain of mustard-seed becomes a tree, sheltering already a large aviary in its boughs; the woman, dancing a hornpipe with the Dutch broom, has swept her house, and lo! the piece of silver that was lost in her hand; a servant, who is digging a hole in order to hide his lord’s talent under a tree, is overlooked by a magpie and two crows, who are attentive witnesses of the deposit;—and many others too numerous to mention. So much for the empty school-room, but what’s a hive without bees, or a school-room without boys? The reader who has peeped into it untenanted shall now, if he pleases, be introduced, *dum fervet opus* full and alive. Should he not be able to trace out very clearly the system at work, he will at least be no worse off than the bee fancier, who hears indeed the buzzing, and sees a flux and reflux current of his winged confectioners entering in and passing out, but cannot investigate the detail of their labors any further. In the Yverdun, as in the hymenopterous apiary, we swarmed, we buzzed, dispersed, re-assembled at the sound of the bell, flocked in and flocked out, all the day long; exhibited much restlessness and activity, evincing that something was going on, but *what* it would have been hard to determine. Here the comparison must drop. Bees buzz to some purpose; they know what they are about; they help one another; they work orderly and to one end,—

“How skillfully they build the cell,
How neat they spread the wax,
And labor hard to store it well
With the sweet food,” etc., etc.

In none of these particulars did we resemble the “busy bee.” This being admitted, our object in offering a few words upon the course of study pursued at the chateau is not with any idea of enlightening the reader as to anything really acquired during the long ten hours’ session of each day; but rather to show how ten hours’ imprisonment may be inflicted upon the body for the supposed advantage of the mind, and yet be consumed in “profitless labor, and diligence which maketh not rich”; to prove, by an exhibition of their opposites, that method and discipline are indispensable in tuition, and (if he will accept our “*pathemata*” for his “*mathemata*,” and guides in the bringing up of his sons) to convince him that education, like scripture, admits not of private interpretation. Those who refuse to adopt the Catholic views of the age, and the general sense of the society in which they live, must blame themselves if they find the experiment of foreign schools a failure, and that they have sent their children “farther to fare worse.”

And now to proceed to the geography class, which was the first after breakfast, and began at half-past eight. As the summons-bell sounded, the boys came rushing and tumbling in, and ere a minute had elapsed were swarming over, and settling upon, the high reading-desks: the master, already at his work, was chalking out the business of the hour; and as this took some little time to accomplish, the youngsters, not to sit unemployed, would be assiduously engaged in impressing sundry animal forms—among which the donkey was a favorite—cut out in cloth, and well powdered, upon one another's backs. When Herr G—— had finished his chalkings, and was gone to the corner of the room for his show-perch, a skeleton map of Europe might be seen, by those who choose to look that way, covering the slate. This, however, was what the majority of the assembly never dreamt of, or only dreamt they were doing. The class generally—though ready when called upon to give the efficient support of their tongues—kept their eyes to gaze elsewhere, and, like Solomon's fool, had them where they had no business to be. The map, too often repeated to attract from its novelty, had no claim to respect on other grounds. It was one of a class accurately designated by that careful geographer, old Homer, as "*μαψ ov Kara Kocμov*." Coarse and clumsy, however, as it necessarily would be, it might still have proved of service had the boys been the draughtsmen. As it was, the following mechanically Herr G——'s wand to join in the general chorus of the last census of a city, the perpendicular altitude of a mountain, or the length and breadth of a lake, could obviously convey no useful instruction to any one. But, useful or otherwise, such was our *regime*,—to set one of from fifty to sixty lads, day after day, week after week, repeating facts and figures notorious to every little reader of penny guides to science, till all had the last statistical returns at their tongue's tip, and knew, when all was done, as much of what geography really meant as on the day of their first matriculation. Small wonder, then, if some should later have foresworn this study, and been revolted at the bare sight of a map! All our recollections of *map*, unlike those of *personal* travel, are sufficiently distasteful. Often have we yawned wearily over them at Yverdun, when our eyes were demanded to follow the titubations of Herr G——'s magic wand, which, in its uncertain route, would skip from Europe to Africa and back again—*qui modo Thebas modo me ponit Athenas*; and our dislike to them since has increased amazingly. Does the reader care to be told the reason of this? Let him—in order to obtain the pragmatic sanction of some stiff-necked examiner—have to "get up" all the anastomosing routes of St. Paul's several journeyings, have to follow those rebellious Israelites in all their wanderings through the desert, to draw the line round them when in Palestine; going from Dan to Beersheba, and "meting out the valley of Succoth"; or, finally, have to cover a large sheet of foolscap with a progressive survey of the spread of Christianity during the three first centuries—and he will easily enter into our feelings. To return to the classroom. The geographical lesson, though of daily infliction was accurately circumscribed in its duration. Old time kept a sharp look-out over his blooming daughters, and never suffered one hour to tread upon the heels or trench upon the province of a sister hour. Sixty minutes to all, and not an extra minute to any, was the old gentleman's impartial rule; and he took care to see it was strictly adhered to. As the clock struck ten, geography was shoved aside by the muse of mathematics. A sea of dirty water had washed out in a twinkling all traces of the continent of Europe, and the palimpsest slate presented a clean face for whatever figures might next be traced upon it.

The hour for Euclidizing was arrived, and anon the black parallelogram was intersected with numerous triangles of the Isosceles and Scalene pattern; but, notwithstanding this promising *début*, we did not make much quicker progress here than in the previous lesson. How should we, who had not only the difficulties inseparable from the subject to cope with, but a much more formidable difficulty—viz., the obstruction which we opposed to each other's advance, by the plan, so unwisely adopted, of making all the class do the same thing, that they might keep pace together. It is a polite piece of folly enough for a whole party to be kept waiting dinner by a lounging guest, who chooses to ride in the park when he ought to be at his toilet; but we were the victims of a much greater absurdity, who lost what might have proved an hour of profitable work, out of tenderness to some incorrigibly idle or Bæotian boy, who could not get over the Pons Asinorum, (every proposition was a *pons* to some *asinus* or other,) and so made those who were over stand still, or come back to help him across. Neither was this, though a very considerable drawback, our only hindrance—the guides were not always safe. Sometimes he who acted in that capacity would shout "Eureka" too soon; and having undertaken to lead the van, lead it astray till just about, as he supposed, to come down upon the proof itself, and to come down with a Q. E. D.: the master would stop him short, and bid him—as Coleridge told the ingenious author of *Guesses at Truth*—"to guess again." But suppose the "guess" fortunate, or that a boy had even succeeded, by his own industry or reflection, in mastering a proposition, did it follow that he would be a clear expositor of what he knew? It was far otherwise. Our young Archimedes—unacquainted with the terms of the science, and being also (as we have hinted) lamentably defective in his knowledge of the power of words—would mix up such a "farrago" of irrelevancies and repetitions with the proof, as, in fact, to render it to the majority no proof at all. Euclid should be taught in his own words,—just enough and none to spare: the employment of less must engender obscurity; and of more, a want of neatness and perspicacity. The best geometrician amongst us would have cut but a bad figure by the side of a lad of very average ability brought up to know Euclid by book.

Another twitch of the bell announced that the hour for playing at triangles had expired. In five minutes the slate was covered with bars of minims and crotchets, and the music lesson begun. This, in the general tone of its delivery, bore a striking resemblance to the geographical one of two hours before; the only difference being that "ut, re, me," had succeeded to names of certain cities, and "fa, so, la," to the number of their inhabitants. It would be as vain an attempt to describe all the noise we made as to show its rationale or motive. It was loud enough to have cowed a lion, stopped a donkey in mid-bray—to have excited the envy of the vocal Lablache, or to have sent any *prima donna* into hysterics. When this third hour had been bellowed away, and the bell had rung unheard the advent of a fourth—*presto*—in came Mons. D—, to relieve the meek man who had acted as corypheus to the music class; and after a little tugging, had soon produced from his pocket that without which you never catch a Frenchman—a *thème*. The theme being announced, we proceeded (not quite *tant bien que mal*) to scribble it down at his dictation, and to amend its orthography afterwards from a corrected copy on the slate. Once more the indefatigable bell obtruded its tinkle, to proclaim that Herr Roth was coming with a Fable of Gellert, or a chapter from Vater Pestalozzi's *serious*

novel, *Gumal und Lina*, to read and expound, and catechise upon. This last lesson before dinner was always accompanied by frequent yawns and other un-repressed symptoms of fatigue; and at its conclusion we all rose with a shout and rushed into the corridors.

On resuming work in the afternoon, there was even less attention and method observed than before. The classes were then broken up, and private lessons were given in accomplishments, or in some of the useful arts. Drawing dogs and cows, with a master to look after the trees and the hedges; whistling and spitting through a flute; playing on the patience of a violin; turning at a lathe; or fencing with a powerful *maitre d'Armes*;—such were the general occupations. It was then, however, that we English withdrew to our Greek and Latin; and, under a kind master, Dr. M——, acquired (with the exception of a love for natural history, and a very unambitious turn of mind) all that really could deserve the name of education.

We have now described the sedentary life at the chateau. In the next paper the reader shall be carried to the gymnasium; the drill-ground behind the lake; to our small menageries of kids, Guinea-pigs, and rabbits; be present at our ball and skating-bouts in winter, and at our bathings, fishings, frog-spearings, and rambles over the Jura in summer.

We regret not to have seen the second installment of this English boy's *Reminiscences of Student Life at Yverdun*. If written, it was not published in the magazine in which the first appeared. The student does not appear to have appreciated or have profited by Pestalozzi's original methods, which are herein so well set forth. He was not caught young enough and had become too hardened in the unvitalized and mere memory processes of the English public schools.

REMINISCENCES OF DR. MAYO.

We find in the reminiscences and life of another English visitor, who became both student and assistant at Yverdun, a more hearty appreciation of the great educator's personal character, and the fruitful results of his sojourn in the old feudal castle and in the somewhat noisy family and not very wisely administered institution of Pestalozzi. We close this chapter with an extract from a pamphlet issued by Rev. Charles Mayo, LL.D., in 1826, giving the substance of several lectures delivered by him in the Royal Institution in Albemarle Street (founded by that great practical educator and countryman of ours, Count Rumford—Benjamin Thompson, of Walpole, Mass.), on the principles of Pestalozzi's educational system. Dr. Mayo and his daughter introduced into England the Pestalozzi improved methods of infant and child instruction, which were pursued in the Model and Training Schools, of the Home and Colonial Society in London, and which Mr. Sheldon introduced a quarter of a century later into the Model and Training Institution of Oswego, N. Y.

Some years ago an Irish gentleman, traveling through Yverdun, in the Pays de Vaud, was prevailed on to spend a couple of hours in the Institution of Pestalozzi. The first class he inspected was carried on in a language not familiar to him, yet was he much struck with the intelligence and vivacity portrayed in the features of the pupils. But when, the following hour, he witnessed the

power of the method in its application to arithmetic, he discovered in the scholars a clear conception of number and its relations, a precision and rapidity in mental calculation, and an animation and interest in their employment, which convinced him that a secret had been discovered by Pestalozzi, and he was resolved, if possible, to penetrate it. The proposed visit of two hours terminated at the expiration of three months; nor was his admiration of the method confined to a bare speculative reception of the principles; he transplanted into his own country the practical truths he had learned in Switzerland, and though Providence has interrupted the course of his more extended labors, he still, in the bosom of his own family, applies the lessons of Pestalozzi, and teaches his children to revere his name. It was not a theoretical examination of the method that effected this conviction and animated to these exertions; it was a personal view of the practical influence of the system, in scenes lit up by the genius and warmed with the benevolence of Pestalozzi himself. Could I transport you in thought to the scenes where Pestalozzi lived, and taught, and suffered with his scholars, the heart would feel even before the understanding discerned the beauty, the truth of his principles. A skeleton view of his system might lead you to a cold approbation of his views, but it must be the living, the breathing, portraiture of the man that must awaken your love, and dispose you to imitate what you have learned to admire. I have seen him surrounded by his pupils, have marked the overflowings of his tenderness; I have read in a thousand traits of good-nature the confirmation of his history. I have witnessed the affecting simplicity, the *abandon* with which he speaks of all he has done and essayed to do for humanity. Could I convey to others the sentiments I feel for him, Pestalozzi would be loved and honored as he deserves. Three years of intimate connection with him, every day marked with some proof of his affection, may well have knit my heart to his; and among the most cherished recollections of the past is, that Pestalozzi honored me with his friendship, and thanked me for cheering his decline.

HENRY (LORD) BROUGHAM.

Among the English visitors to Pestalozzi, whose testimony to the originality and value of his methods as well as to the disinterested character of the man, before the Education Committee of 1818, carried immense weight wherever the proceedings of the English parliament were known, was Henry Brougham. He commenced in 1816 that public agitation of the claims of the people to better schools which culminated in the legislation of 1870.

It was Pestalozzi and men of his type who inspired the Great Commoner of England, as Henry Brougham was called before a title had confounded him with a group of much inferior men, with his exalted estimate of the schoolmaster in his peaceful vocation.

"His calling is high and holy; his fame is the property of nations; his renown will fill the earth in after ages in proportion as it sounds not far off in his own time. Each one of these great teachers of the world, possessing his soul in peace, performs his appointed course,—awaits in patience the fulfillment of the promises,—resting from his labors, bequeaths his memory to the generation whom his works have blessed,—and sleeps under the humble but not inglorious epitaph, commemorating one in whom mankind lost a friend, and no man got rid of an enemy."

FRIEDERICH FRÖBEL UPON PESTALOZZI.

LETTER TO THE PRINCESS-REGENT OF SCHWARZBURG-RUDOLSTADT,
April 27, 1809.

MAN AS THE SUBJECT OF EDUCATION.

PESTALOZZI's principles of education and instruction and his proceedings, growing out of them, and the means for their application are founded entirely upon the phenomena of his existence as a created being.

Man as he is represented to us is a union of three chief attributes; body, soul, mind; to cultivate these harmoniously and as a whole is his object. Pestalozzi goes from this existence of man into the phenomena, that is, from that which he is by the sum of his powers and according to his destiny (its suitable culture). Hence he takes man into consideration according to this sum of his powers as a bodily, intellectual and emotional being, and works upon him in this sum of his powers and for their harmonious development and culture, from which first arises that whole which is called man.

Pestalozzi, therefore, works not merely upon the bodily powers and their development, not only upon the culture of the mind and its development, nor only upon the soul and its development (although he is accused of doing so), nor merely upon two of these at once, as body and mind, or body and soul, or soul and mind. No! Pestalozzi develops man, works upon man in the totality of his powers.

Man in his manifestations must run through three principal epochs, according to his powers; that of the body, that of the soul, that of the mind; he runs through them not separated, or singly, so that he first runs through that of the body, then that of the soul, and at last that of the mind; no, these epochs are convertible in the man developed in perfectly undisturbed natural relations; their circular course returns ever again, and the more so the more perfect the man becomes—until the limits of his powers as well as of their development fall away and are removed, and the continuous whole—man—stands before us.

It would be highly unjust, therefore, to say of Pestalozzi that he developed men, the powers of men, each power separately at three different epochs, first the body, then the soul, and then the mind, since he really takes them all into view at once in harmonious and brotherly union, and although he seems, perhaps, for the time to be treating merely the physical powers, he is observing and taking into consideration equally the influence of this treatment upon mind and soul.

He has man as a whole in his eye, as an unseparated and inseparable whole, and in all that he does and wishes to do for him and his cultivation, he does it for him as a whole. At no time does he act only for

the development of one power, leaving the others without nourishment; for example, he never is acting for the mind alone and leaving unconsidered, unsatisfied and uncared for and in inaction the body and the soul; all the powers are cared for at all times.

But often one or other of the three great divisions of man's nature stands forth and apparently dominates the others.

Pestalozzi takes into view man according to and in his manifestation, according to the laws of nature and those which are grounded in the mind of man, when he works specially upon the predominant power; it is not done in an isolated and divided way, but in order to work through his treatment upon the other equal but slumbering and resting powers. So, for example, in one and the same epoch upon the senses, through these upon the body, and through these again upon the feelings, and so in a perpetual round.

Pestalozzi takes man according to his manifestation. But man does not manifest himself alone, for and through himself; he manifests himself under conditions determined by nature and by his mother, and both these united—that is, by love.

So the man becomes child, that is, the sum and substance of the love of the father and mother.

Pestalozzi then wishes to develop and cultivate the man in his manifestation as child, through the conditions under which he appears, that is, the love of the father and mother. We think of the father and mother as united by love in order to exalt the child, i. e., the sum of their love, into an independent being by means of education.

Can there be a truer, more careful nurse and developer of this love made visible, this independent essence, this child, than the father and the mother, than the two united by mutual love, to which the child owes his existence—indeed, whose sum and substance the child is?

Pestalozzi thus wishes only what nature and the being of man wishes; he wishes that man in his manifestation as child shall be developed by his father and mother, and in their mutual love be cultivated throughout and educated according to his capacities as a corporeal, feeling and intellectual being.

MAN IN HIS MANIFESTATION AS A CHILD.

The existence of mind and soul in the child is expressed merely by simple life.

Mind and soul appear limited by and in the mass, the body—for still all parts in the body are one; the mind and the senses by which the world without works through the body upon the mind and soul are not yet distinguishable.

The body of the child is still a mass; it appears so tender and frail, so much too material and awkward for the mind and the soul of the child, yet slumbering and weak, to work through it.

By degrees the senses, feeling, sight, etc., develop and separate.

The child feels the warmth of the mother's breast and the breath of her loving lips; it smiles (the first appearance of the *soul*, the first sign of the soul's existence).

The child perceives the mother; it feels her nearness, her distance, etc.; the child *looks* (the first appearance of *mind*—the first sign of its existence).

At the moment of the beginning of this separation of the senses, the true mother works upon the unfolding and development of the child according to its various capacities; the love of the mother makes the child feel, see, hear.

Thus are developed, without giving any account of themselves—yielding only to holy feeling, to the demands of their nature—the *senses of the child*, which are the paths to its mind and soul.

Here is the third point, where Pestalozzi takes into account the parents—where he appeals to them with the view of exalting the being of their love to the higher life, to conscious independence—where he gives them means and guidance to develop and cultivate the capacities of their child.

What Pestalozzi wishes as means of development he had pointed out in his *Book for Mothers*, which many have misunderstood and which is yet the highest which can be given to man, the most loving feeling could create, the highest and best gift which he could bestow in the present circumstances upon his brethren and sisters.

What Pestalozzi expresses in that book are only suggestions of what lies in his soul, as a great, glorious, living and unspeakable whole.

His soul felt the joys of heaven in his intuition of the perception of the father and mother following the call of nature by the education of their children. Overpowered by this heavenly joy, he sat down and wrote, not for word-catchers and quibblers—no! he wrote for parents, for fathers, for mothers, who he thought would conceive and feel as he did, to whom he only needed to point out what they should do, what they could do, and how they could do it.

The highest object of recognition, of the intuition of mind and soul to man, is humanity.

Pestalozzi took pleasure, in his *Book for Mothers*, in pointing out to man what he wished; and, in order to point out all that he wished, could he choose anything higher and more perfect than man, whose body is destined for the earth and whose being is destined for heaven? That he chose the highest, the most perfect thing, is now made a reproach to him!

But is there a more glorious, more exalted, more beautiful, more worthy object of observation and recognition than man?—and is not the body the house of our spirit, which is destined for eternity and for communion with God? Can it, as he himself says, be contrary to nature to learn to know it *early*, to respect it *early*, to rejoice in it *early*, that it may be made holy for us? Can it, as they charge Pestalozzi,

be contrary to nature to orient one's self early in the house where one dwells?

As I stand before you, it cannot be my aim to contradict the objections of Pestalozzi's opposers, who for the most part misunderstand him, since I am merely striving to represent literally the essence of Pestalozzi's fundamental efforts according to his own representation; I merely say that a great part of the objections made to these efforts consists in this; that Pestalozzi, for various reasons, errs very much when he enlists the child himself in the first cognition and development of himself and the man, and even starts from the body of the child.

But how can it be a crime; how can it be against nature to respect the body early, to learn early to know the body and its use, the use to which we all owe everything, by which alone we learn to know the world without, which helps us to sustain and battle for our life, as it helps us to recognize God, to do good, and to rescue our brothers and sisters with strong arms from the brink of perdition?

Truly, whoever wishes to teach the child to respect his body must respect himself; if he wishes to learn to know it, he must know himself; whoever wishes to instruct in the use of it, must know it himself, all this must come to his consciousness; whoever works to make the child feel the sacredness of his body, to himself it must be sacred!

Indeed, no man could understand Pestalozzi who had not in his soul, when this elementary book first fell into his hands, that which Pestalozzi felt to be exalted in humanity; to him those principles were dead forms without sense or significance, and afterwards one person, perhaps without examination, repeated the judgment of another who seemed to him well-informed.

But were all these men parents to whom Pestalozzi spoke? Noble Princess, if I were not afraid of wearying you, I could say much upon the excellence and the principles of Pestalozzi, of the man himself; I only permit myself to express one thing of which I am deeply persuaded in my own mind.

Many a young man and boy, powerful by the nature of their collective capacities, would not have lost his powers in the bloom of his youth, if his parents or teachers had followed in his education the principles laid down by Pestalozzi in his *Book for Mothers*.

Many a young man would have known how to be a useful and estimable subject, in the years of his ripeness and understanding, if his body could have fulfilled the requisitions of his mind and heart.

Pestalozzi's *Book for Mothers* is only a suggestion of what he wishes to do; he wrote significantly; "or a guide for mothers in the observation of their children, and to teach them to speak."

But man is not the only thing upon earth; the whole outward world is the object of his recognition, and the means for his development and culture.

Pestalozzi said, therefore, and still says: "As I have shown you that you can bring man by degrees through gradual development of the child to the conscious inspection and recognition of the world without, so bring every other object of the world without to his inspection and recognition, every object which approaches the child, which lies in his circle, in his world, as he himself lies in this world!"

Scarcely does it seem possible that herein can lie anything contrary to nature, difficult to be recognized, or difficult to be carried out, and yet the opponents of Pestalozzi find more than all this in it. Pestalozzi's opponents reproach him strongly that he merely speaks of this observation and recognition.

But we observe with all our senses, and how could Pestalozzi believe that any one would accuse him, when he used the word observation, of meaning simple observation with the eyes?

The *Book for Mothers* is to teach the mother, in the first place, to develop and to cultivate the senses of the child both singly and in their harmonious united working. In the second place, it is to show how and in what natural series of steps, one may bring the objects of the world in which he lives to the observation and recognition of the child. In the third place, it is to put the mothers and the teachers in a condition to teach the child the use and destination of his powers and capacities, as well as the use and design of the objects of the world without; and to bring them to his consciousness.

And in all this they accuse Pestalozzi of expressing one-sided principles and methods of instruction, although it is surely impossible to fulfill the conditions he requires without developing and cultivating man in all the directions of his great powers.

Others came forward and said, Pestalozzi would have dead words and repetitions; what he gives is dead and therefore killing. Still others came forward and said what Pestalozzi wishes the child to know should be taught him earlier and better; they point to the number of children's books that have appeared for every age, and for children of all conditions; to the books that have been written on natural history, on excursions, journeys, stories and picture books of all kinds, etc.

By all these means that has not been done which Pestalozzi wishes to have done. Everything is given to the child prepared and related, so that his understanding has no work to do.

The powers of the child's mind are not rendered active and self-working. The understanding of the adult has already prepared everything so that the activity of the child's understanding and recognition are left without employment. The consequence of this is weakness of mind and especially of the self-acting judgment of the child, and his egress out of his own inner world instead of making him at home in it and acquainted with it.

They have also reproached Pestalozzi for the form of his *Book for Mothers*. But when he wrote, it was not his opinion that the father,

mother, teacher, whose hand-book he designed it to be, would necessarily confine himself strictly and anxiously to his representations. He strove only to represent what was essential in general, so far as this was possible for him to do so, and to touch upon all parts of the whole.

Some complained in regard to the book that the sequence was not logical enough; but Pestalozzi wished neither to establish a strong logical sequence, nor, still less, to confine the use and application of it.

What Pestalozzi had really contemplated was in the opinion of others too precise and stiff.

Although it was hardly possible that Pestalozzi should not begin his list of the parts of the human body with the head, he did not say that if other parts, the hand for example, should attract the attention of the child, it should be withdrawn from that and directed to the head because that happened to stand first in the book. Pestalozzi says expressly, the peculiar *Book for Mothers* is the nature of the child in its manifestations.

I know a mother who has treated her child now two and a quarter years old in the spirit of Pestalozzi, and according to his meaning. It is delightful and exalting to the heart to see that mother and child.

And surely the object of that mother's activity, the inner life of her soul, could not permit her through her love for her child, indeed, would make it impossible for her, to follow to the letter the directions in Pestalozzi's book; yet this mother did not find his writings contrary to nature, nor killing to the mind of her child; no! It was what Pestalozzi wished that she comprehended in her inmost soul. It is a joy to see that child with his angelic voice, his childlike innocence, and his love not only for his mother, but for everything that surrounds him.

It is the highest enjoyment to see how at home the child is in his world, how continually active and occupied he is in it. He stands now at a higher point of knowledge and acquaintance with the world around him, but uninjured in his innocent childishness.

This child lives a gentle inner life; he rejoices inwardly in awakening nature, and seizes everything with attention that strikes his senses which his early awakened powers of body and mind make easily possible to him. The mother followed Pestalozzi; what she did she did by following his meaning. It is not possible in the working of these principles to see the limits of the culture of body, soul and mind.

Often and willingly has this mother said, who always strove to do her duty before she knew of Pestalozzi, that from Pestalozzi she had learned how to be a mother.

Pestalozzi's *Book for Mothers* would have been much less unjustly judged if the second part had yet appeared. It is still wanting, alas! Pestalozzi has not expressed his idea fully in its application; this is an important view which every one should take before forming a judgment.

As much and even more should be taken into consideration in judging of the book, is that what Pestalozzi wishes is not limited to the

time when the faculty of speech appears in the child, or even when it actually begins to speak; no! it begins in the working and application at the moment when the child perceives outward impressions decidedly, that is, discriminates between light and darkness. The mother must already have taught the child to observe everything, to separate everything which comes within the circle of his life, before the peculiar moment of time when the development of language begins.

I know children so treated who were a year and a half old before they began to speak, but who could discriminate between all things that immediately surrounded them, and appeared to have distinct and quite significant conceptions of everything. If the child has been so treated it has the very essential and useful advantage, when it does begin to speak, of knowing well the objects it is about to name, and hence needs not to divide its powers but can apply them unitedly in the naming of them. It can now make important progress in speaking, and this is really the case with such children.

The *Book for Mothers* first gave a guide for teaching the child to observe that language is the medium of sympathy.

The mother must work according to nature, at the same time upon the child's capacity for language and its development. To elevate the social life between mother, father and child, the mother widens the child's power of language. The father, the mother, the members of the family, now teach the child the meaning of the language they speak, that they may mutually understand each other more easily, and sympathize about everything that surrounds them.

But Pestalozzi not only wishes that everything that happens unconsciously shall be brought to the consciousness, that that which has happened shall not be left to chance, but that it shall happen consecutively, all-sidedly and comprehensively, and in conformity with the developing progress of the child.

The meaning of language which Pestalozzi now wishes to have the child learn is the meaning of it in the closest sense, the special meaning; for only from the knowledge of the particular and individual thing can man rise to the knowledge and command of the universal.

The child is taught then the meaning of every single word, every single expression. The manner in which this is done lies darkly in the demands of human nature, but the *Book for Mothers* gives this guidance in the first place.

According to Pestalozzi the child is now to learn by observation, for example, the meaning of contrasted words which it either hears or even speaks already intelligibly; as dark, bright; heavy, light; black, white; transparent, opaque; there, here; furniture, tool; animal, stone; go, sit; run, creep; coarse, fine; more, less; one, many; living, dead; prick, cut, etc. Pestalozzi here shows particularly how contrast, which he always designates as to be found in every conception, is specially cultivating.

Thus far the mother has developed the child's capacity of language according to Pestalozzi's method; she has taught it to speak. But now before she carries it farther, she and other members of her family must cultivate this capacity.

The speaking of the child rises by degrees to connected language. The child knows and raises itself to a determined knowledge of the meaning of all that it speaks.

By all that the mother has hitherto done for the child, it is now in a condition to know precisely the objects with which it is surrounded, to observe them singly, to separate them from each other. Its power to observe is perfectly awakened, and in full activity. The circle of its knowledge widens as its world widens; it accompanies its mother wherever her employments call her. It is continually led to know more objects of the surrounding world. The objects themselves stand forth more and more prominently.

It recognizes intelligibly what was hitherto unknown and unseparated, and still lies partly so, and will continue to be more or less so until it consciously surveys a fixed portion of the outward world, and free and independent of that world, can again create and represent it.

To raise the child to this perfectly conscious recognition of the outward world, must hence be the object of its mother's striving. The glorious kingdom of nature now opens by degrees to the child; led by its mother's hand it enters that glorious kingdom. Nature is now its world; the child creates nature from its world.

A hundred little stones, a hundred little plants, flowers, leaves, a hundred little animals, innumerable objects of nature accompany its steps; its heart beats loudly. It finds friends, it carries about and takes care of objects; but it does not know why it is happy, why it carries about and takes care of these objects, why its heart beats so loudly. Should these impressions be allowed to vanish without having been firmly retained?

According to Pestalozzi, the mother now teaches the child to perceive these objects on all sides, to recognize all their qualities, that is, with the help of all their senses; she teaches it to use its observation upon the whole aspect of them, and to give an account of them to others.

The child now holds firm points to which it can fasten its joy,—sound, motion, shape, form, smoothness, etc. It sees the connection of these qualities and a hundred others to qualities partly determinable, or merely supposable; so that the child is now first conscious of its joy.

How happy is the child now whom its mother has made conscious of all these impressions, so that he possesses a firm point by which the outward world stands in contact with him, so that he does not remain in the dark with his heart oppressed with feeling; so that he does not wander in a mist like the traveler who journeys through a pleasing country on a spring morning when nature is partly wrapped in vapor, and shows him the light that gleams through it, promising a delightful

view. As man longingly waits for the dispersion of the mist by the rays of the sun, so that the objects of nature may appear in light and clearness, so the child waits for the guidance of the loving mother who will explain to him the rapture of his heart and show him why he rejoices in anticipation.

What a calling for the mother! She teaches the child to become conscious of his joys, of the objects of his delight; she teaches it how to give an account of all it sees and feels, to express it in words and to share it with others.

The mother thus raises the child into a creature of intelligence and feeling; she teaches him the qualities of objects; she listens to every remark, every discovery, every word of her child; she rejoices when he rejoices; she receives his love and sympathy in her own breast, she reciprocates it and guides it with delight.

As the nature of the child receives life and significance thus, so the language which the child, the mother, the father, the family speaks, receives life and significance. Every word becomes an object, an impression, a picture; to every word the child joins a world, a cycle of impressions; he goes in his remarks upon the qualities of things, from the easier to the more difficult, from the simple to the complex; he loves to seek and find it all himself; "Dear mother, let me find it myself," he says. Often have I with joy and light-heartedness heard children make this prayer with shining, sparkling eyes!

Later, the mother leads her child to classifying similar things (which it tends to do of itself) and to discriminating between different things; thus the child learns to compare what it sees.

The child besides observing, also imitates. Imitation betters and perfects his observations. The mother not only allows this imitation, she not only rejoices in it, but she aids it.

The child likes above all things to imitate the sound which it has evoked from some inanimate object perhaps, or which it seems to him to produce. It tries to imitate the sound of everything, falling, jumping, breathing, moving. All the objects of nature, animate and inanimate, seem to emit sounds; they speak audibly to him. The mother rejoices in the child's delight when in the spring it imitates the sounds of nature, and she challenges him to do it; she does it unconsciously when her impulse to do it is not disturbed. Who has not seen a poor mother playing with her child or heard her say, "What does the sheep do? What does the dog say, the ox, the bird?" The child's imitations increase; it imitates the twittering of the bird, and thus its own human tone is awakened.

If the mother sings, and accompanies the song of the birds with her human tones, he will imitate this, and thus will not only his feeling be awakened for the highest human expression, song, but his whole being is exalted, from the humming of the bees to the representation of his own feelings by simple, connected and varied human tones.

The outward world is now no longer to the child, guided by Pestalozzi's method, the chaotic, confused, misty mass, which it was earlier. 1. It is now individualized. 2. What is separated it can name. 3. It can seize it at a glance independent of other relations, and according to its relation to himself and to others. 4. It can designate what it observes and all its relations by language; it can speak and knows the meaning of the language of its parents. 5. It knows an object not only on one side but on several sides. 6. It can take an object in at a glance in many relations. 7. It can compare one object with another and recognize the peculiar qualities of each.

Ideas of Number.

The first general quality of objects is their computability. Objects are now individually separated to the child's mind, consequently following each other in time and thus appear computable.

The mother now teaches her child to recognize the computability of objects, and to separate the qualities and relations of computable objects in nature, with real objects before it, and not first by counting in an abstract manner.

By the exercises arranged by Pestalozzi the mother brings to the consciousness of the child something which hitherto was merely an obscure presentiment, scarcely a conscious feeling; she brings the conception of number, the precise knowledge of the qualities and relations of the computable, to his clear, intelligible consciousness.

The mother teaches the child that one stone and again one stone are two stones, etc.

Farther, she teaches him to know the value of numbers by the opposite process, for example, ten nuts less one nut are nine nuts.

Already this little exercise has brought conversation to life between mother and child, when, for example, in the first case, she says to the child, "Lay down two flowers and one flower; how many flowers have you? how many times one flower have you? how many times two flowers have you?" etc.

Or, in the second case, for the solving of numbers, she says to the child, "Put away one of your six beans; now how many have you? how many times one bean have you still?"

The mother goes a step farther; she now lets him add two, three and four; for example: "One stone and two stones are three stones."

The child learns by observation that 5 are 5 times 1, are 4 and 1, and 3 and 2.

Or, 1 and 3 are 4, 4 and 3 are 7, 7 and 3 are 10 objects.

The mother then goes backwards over the same ground. For example: if you take 2 from 15, 13 remain.

Questions enliven and elevate conversation between the mother and child.

The mother may work in the field or in the house; the child sits near

and plays with stones or flowers. The mother asks: "When you put 2 flowers to 1, how many have you?"

All this is play to the child; it handles its favorite objects; it moves them about, and sees a purpose in doing it, for in all its plays the child gives itself a problem. The child is with its mother, so it is happy, and its mind and feelings are awakened.

When the child knows how to count in these different ways, and knows the qualities of numbers thus represented, it will soon find that the pea leaf has 2 times 2 little leaves, and the rose leaf 2 times 3 little leaves. A hint to the mother, and she carries her child still another step in the knowledge of computation. The child has several single objects around it. "Place your little blocks," the mother says, "so that 2 will lie in every heap. Have you done it? Count how many times 2 you have." The child will count: "I have 2 times 2, 3 times 2, or I have 1 time 2;" or it will say perhaps a little later, "I have 1 two heap; 2 two heaps," etc.

The mother goes farther and says: "Place your things so that 3 or 4 or 5 will lie together, and tell me how many times 3 or 4 or 5, etc., you have." [She selects one of these numbers, of course. We omit many similar exercises in numbers now familiar to kindergartners.]

FORM.

So Pestalozzi would have the mother teach the child form in its play.

"Here is a lath—it is straight; here is a branch—it is crooked." The child remarks the laths on the fence, the prongs on the rake; they are at equal distances from each other. His mother tells him they are *parallel*. The ribs on the leaf of the large plantain unite in a point; they are radiating. The child goes into the woods with its mother; it sees the fir trees and the pines, it is pleased with the variety; and it knows how to describe it. The needles of the fir tree are *parallel*, those of the pine unite in a point.

The child observes the relations of the branches to the stem. Its mother has taught it to observe angles. The branches and the stems form angles, but these joinings of branch and stem make in one tree quite a different impression upon the child from those in another tree. How delighted it now is to recognize this variety, so that it has a firm point to which it can fasten its impressions. It is the greater or less inclination of the branch to the stem. So in the surroundings in nature, which is its world it recognizes, led by its mother, it sees 3 or 4, or many cornered forms. The intersection of the hemlock twig forms a regular pentagonal (or five corners). The mother leads the child to a regular comparison of this form and to seek its variety.

The child will soon pluck leaves and find other objects in view of their forms, and with childish critical senses will separate them from the objects to which they belong. He will go farther than I venture to describe.

"See, mother, what round leaves I have found," and the child shows

the mother many such leaves, of larger and smaller sizes, which he has picked. "See how little this one is, and how big this one is!" he thus leads himself to the contemplation of size. A hint, a word from the mother, and the child has received a new item of culture.

He selects three leaves, lays them upon each other, and says: "That is the largest leaf, that is smaller, but that is the smallest."

"Mother, look at this long stalk. The stalk of the flax is only half as long," he will perhaps say, if he has learned the meaning of the word half. Or, after the mother has laid the flax upon the corn stalk, he will say, "this is 2 times as long," or perhaps as long again as that one, or he breaks a pear leaf in the middle, lengthwise, and finds both halves equally long; perhaps he cannot describe what he finds and his mother tells him that these two parts of a whole are called halves, and thus widens the circle of his knowledge again.

Pestalozzi wishes to make known intelligibly in small things the attributes of form as well as the recognition of the foundation of its qualities.

The child will lead on the attentive mother and father still farther.

The child will soon come to the consideration of large equal objects in comparison with large unequal objects; he will find that a part is smaller than the whole, the whole is larger than a part.

Objects of nature as well as of art will lead the child to this comparison.

Everything in his circle, in his world, will thus become means of information, material for development.

If the child is in its earliest years where the mother is, and rightly guided, it costs but a suggestion from her and it can busy itself many hours.

It accumulates objects, arranges and investigates them; it is quiet and happy.

One will scarcely realize that the child is occupied, and yet the powers of its soul and mind are coming forward and developing themselves by practice.

In this way all the capacities and powers of the child are now developed according to Pestalozzi's method; his senses cultivated, his inner and outer being exalted to true life; he errs no more unconsciously as one enveloped in mist; the way is open for every kind of knowledge, every shade of feeling. Sympathy, that beautiful attribute of man, is possible to him in its whole scope; his language is formed.

With deepest love he hangs upon the glance of his mother, his father—the parents to whom he owes all this joy.

All which has thus far been done by the mother was the object of the *Book for Mothers*, and suggested by it; at least this is what Pestalozzi wished for as belonging to the calling of the mother.

Pestalozzi wishes that the child shall live in this manner seven happy, delightful years.

The child has now, thus guided, received its culture through the mother, for what is now in the child, what now transports it will always live in it, will give value to its life, dignity to its being. She now surrenders it fully prepared to the father, the parental teacher, or to his representative, the school-master, for definite instruction, definite teaching.

The instruction which the father or school-master will now give to the child will join on where the mother ended.

The child should find no other difference between this teaching and that of its mother; now every object stands singly, all instruction has a determined time. The manner of handling the subjects of instruction must be in harmony with that of its mother.

Man as a Scholar.

[The next division of this article upon Pestalozzi is entitled *MAN AS A SCHOLAR*, and in it Fröbel describes minutely Pestalozzi's mode of teaching everything:]

Language—the mother tongue in reference to its meaning, the formal part of language; descriptions of nature, of the products of art, of the earth's surface. Second course of geographical instruction, the knowledge of numbers, forms, size, singing, drawing (Schmidt's method), reading, writing.

This instruction is not given from books, but from life, observation of nature, walks, examination of works of art and use, etc., etc.

INTRODUCTION OF THIS METHOD INTO THE SCHOOLS.

The demands which Pestalozzi makes upon the teacher are simple and natural; they are founded in the nature of the teacher as well as in the nature of the scholar. Therefore they will be intelligible and easy of execution and representation to every teacher, even the country school-teacher, who can unite good will with power and understanding, as soon as he has suitably prepared himself in the method. It is the same with the subjects which Pestalozzi wishes to have taught. They go from the simple, their march is connected in a determined sequence lying in the nature of every subject of instruction. If the teacher has been taught only the first point, the nature and essence of his subject, through observation in his own practice, he can not only proceed easily according to the demand of that subject, but even instruct the scholar in it consecutively.

The teacher with good will and the impulse to perfect himself (and upon what teacher who wishes to perfect others would not this requisition be made?) will very soon perceive with the utmost joy the glorious effects of the Pestalozzian method upon himself; he will find it grounded in his nature. The Pestalozzian principles will thus become his own; they will flow into his whole life; and thus he will express it with mind, love, warmth, life and freedom in all his acts, and instruct

and represent it to his scholars according to their needs, as to his own children and brethren.

There would be few difficulties in introducing Pestalozzi's method into the schools, if teachers, and those who feel it their destiny to be such, should make themselves familiar at his institution with his principles, and should acquire the readiness and dexterity in applying them, which they could do on the spot. Supposing that they know and honor the duties and demands of their calling, strive to fulfill them with all their power, and, thinking for themselves, not act mechanically, their efforts would be facilitated by the Pestalozzian method; in the first place because it corresponds to their natures as well as to that of their pupils, and again because its workings will fill them and their pupils with inward joy and exhilarating pleasure; it would enable them to fulfill their calling not only with love and joy, but with power and enthusiasm. They will not be behindhand in their own self-perfecting when they teach their scholars, even the lowly among the people, even the preliminary points of every subject; they will have the opportunity for thought whereby their own minds will be farther developed. Their human hearts, their loving souls, will be filled with nourishment. They will never be machines even when they are teaching the simplest thing; for they will never depend upon arbitrarily given rules, followed every day regularly without farther thought. Indeed, if they wish to teach according to Pestalozzi's principles, it will be necessary to think, so that what they teach will be living and active in itself, and be presented livingly and glowingly so as to awaken life and activity in others.

By their knowledge of this method, the teachers, in order to understand its introduction, will make it not only possible to fulfill their duty far more comprehensively and better than before, but will find their work much facilitated by it, for by its conformity to nature it bears within itself the quality that every advanced scholar will be able to teach and instruct others. Very essential and many-sided advantages will arise out of this to both scholars and schools.

1. All the scholars will be, according to their needs and at all times, employed under a teacher, will be always under inspection, and never left to themselves or to indolence, a thing so common in schools, but will be at all times engaged in their development and culture.

2. For the instructed and assistant pupils will themselves penetrate deeper into the method, and hence be better able to comprehend the teaching they will receive. Their power of thought and judgment will be in continual exercise, their feelings and souls will have the opportunity to practice love and ready service, and thus, while upon one side their understandings will be cultivated, on the other they will rise to practical humanity. The school itself will thus be sustained like a family, the teacher of which is the father, the pupils of which are the children; these will be like brothers and sisters of the same family, in which the weaker will be sustained by the stronger.

Whose heart does not beat quickly to see the schools of his beloved fatherland thus exalted?

The assistant teacher will receive thus the most highly essential advantage; he must never weaken his powers by frittering them away, that he may always be able to devote them wholly to the department taught by him.

The school receives this essential advantage—that unity reigns in the whole instruction. So much more important progress will the pupils make. The school can thus naturally answer perfectly to the demands of the parents, the children always be suitably and directly employed, and all things work together for their culture.

The instruction will thus gain in life, interest and variety by every class of the pupils being occupied specially and particularly according to their ages.

If we were to take into consideration the wants of the people in the arrangement and application of subjects of instruction in the people's schools and the country schools, a teacher in a country or village school, supported by some of his most capable pupils, could fulfill the demands of Pestalozzi for eighty or more scholars by seven hours of daily instruction (two afternoons being excepted).

Since the child is first capable at eight years of age of being treated as a scholar, according to Pestalozzi's principles, if hitherto but little has been done for his development by his parents and his mother, a fixed time, to fall between the sixth and seventh year, must be arranged by local conditions to receive him into the school in order to supply what the first education at home has neglected.

Therefore at first all the children who go to the school will be divided into two principal classes or divisions.

The first division will constitute the children's class, and these pupils will be under eight years of age. The manner of their treatment will be determined by their age, for they are children in the narrow sense of the word; they have not emerged from the circle determined by the foregoing representation of the *Book for Mothers*.

The second division will consist of the school classes, and the pupils will be from eight years up to the age in which they usually leave school. The manner of their treatment is determined by Pestalozzi's method of instruction.

This second division must be divided again into two parts; into the lower class in which the pupils are at all events from eight to eleven years old, and the upper class which contains the pupils from eleven years of age to the end of the school time. The whole school would be divided then into three classes; the first or child's class; the second or lower school class; the third or upper school class.

According to this division of the classes the following subjects of instruction are possible:

The second class could receive two hours' instruction in the descrip-

tion of nature; the third class two hours in natural history. In this way the pupils become acquainted not only with the greater part of the natural products of their fatherland, particularly of the region in which they live, but also of the foreign natural products of essential importance to that region.

The second class could devote two hours in the week to the description of products of art; the third class two hours to technology. And here what is essential to the pupils in the circle in which they live is alone necessary.

Then two hours of description of the earth for the second class, and two hours of knowledge of different countries. The second class could give one of these hours in the middle of the week to a walk. Thus they would learn to know Germany (its physical limits) and especially the Thuringian valley accurately, and have a general view of Europe.

In the description of other countries, they are taught the products of nature and art in each country, the manner of life and system of government of the inhabitants, and the relations of every land and of the inhabitants of each to the territories in which they live.

The fatherland of the pupils stands first in importance in all these three topics.

The second class can have six hours of arithmetic. The third class also six hours of the same. In the second class it will be chiefly mental arithmetic, in the third class chiefly ciphering or written arithmetic (on the slate).

The second class can have four hours upon the theory of forms and drawing; the third class four hours in geometry and drawing. To fix more sharply the relation of the hours for arithmetic, theory of forms, geometry and drawing, a part should be precise local knowledge, a part dependent upon what knowledge the pupils of the child's class in the lower school class already have.

The second class can have six hours of reading and mother tongue; the third class four hours of the formal theory of language.

The exercises in beautiful handwriting can be connected afterwards with grammatical exercises.

The third class needs neither special hours for reading or writing, because the pupils have been firmly grounded in these before they passed into the third class. To practice and cultivate themselves more in both, they find sufficient opportunity in writing upon the other topics.

The second class can have three hours in singing, and the third class the same.

Lastly, the second class can have six hours of religious instruction, and the third class nine hours. In the third class this consists of the reports of the preaching, passages of scripture and songs; in the recitation of Bible texts and songs, not only in the words but in the signification which the pupil has given to both.

The particulars of the instruction in the first or child's class I pass

over, since the subjects, as well as their treatment, are designated in the way in which they are represented.

In no other than the Pestalozzian method can the child be employed in such a variety of ways, or in so few hours could such a goal be reached on every topic.

According to Pestalozzi's meaning and principles, no topic should stand isolated; only in organic union do they lead to the desired goal, which is the cultivation and education of the child and pupil.

This suggestion for the assignment of hours and subjects is only made for the country schools; for the city schools, there are generally three regular teachers for greater perfection of instruction.

But the organization of a school according to Pestalozzi's principles makes two essential requisitions; first, that the children of the school age can only be received into the school at two fixed seasons; and that all school children, except in the vacations, shall come to school punctually and uninterruptedly. If a single hour is neglected by the pupil, it is never possible to make it wholly up without great disadvantage to his companions in that topic, since this method makes a steady advance and is characterized by a continuous progress.

All the faults which hitherto may be found in country and city schools are prevented by the introduction of this method.

Order, permanent and spontaneous occupation, taking into account both mind and character, gradual progress in culture, living and fundamental knowledge in the pupil, love, true love of it on his part, love for the school and for the teacher, contempt for all superficial knowledge in the schools of all kinds, or among the people. These are the essential consequences of schools directed on Pestalozzi's principles.

To every one who relies upon the school for his circle of knowledge, he has marked out the path for perfecting and ennobling himself.

Love for teachers and companions, parents and family, will in ripper age become a more exalted love of country, deep reverence for the princes who are to be regarded as superior fathers.

The many-sided practical power, the strength of mind and body he has acquired, will make it possible for every one so trained to act not only with power for the welfare of his own family, but to be an actively working subject for the good of the people.

Simplicity, contentment with his condition of firm independence of character, thoughtful action, the promotion of family and public happiness, practical virtue, true religion, will characterize the citizens educated according to Pestalozzi's method.

Upon the Possibility of introducing Pestalozzi's Method among the Mothers and Parents of the People, for the Natural Education and Treatment of their Children up to the Sixth Year.

Even the introduction of Pestalozzi's method into the families is not so difficult as it is thought to be, for every mother loves her child, has

him with her most of the time up to a certain age, and willingly converses and occupies herself with him.

It needs little guidance, therefore, even of the uncultivated mother, in order to teach her how to treat her child according to its nature and to lead it farther on than usual; it depends upon how this guidance is given to her.

More words will work quite in a contrary way, but every mother likes to have people interested in her child.

Could these dispositions of the mother be used to give her confidence in Pestalozzi's method so that she could converse with her child and occupy herself with it in an intelligent manner, one might so interest the mother herself in it that she would soon perceive the benefit and joy of the child in her occupation with it; while she occupies herself with the child she cultivates herself also.

But what is thus naturally given must not go beyond her power of conception and representation. The more simple, easy and comprehensible what is given her the better. And what country teacher or country clergyman has not often an opportunity so to influence parents and child!

If even but little can be effected, what is really essential might be done by a country teacher or pastor, with the help of a few members of the community, to spread the knowledge of a better nurture of little children, one more conformable to nature. By the direction of the schools according to the principles of Pestalozzi, where the older and more advanced pupils teach the more backward ones, the introduction and generalizing of the above mentioned treatment of the children would surely be possible, and made far easier because the older members of families are so often left in charge of the younger ones by their parents.

By such direction of the schools, these representatives of the parents may receive the material with which they can develop and cultivate their little brothers and sisters by occupying them happily. How many evils which so often are inflicted upon children might be averted in this way!

The child so guided will never give itself by way of pastime to evil habits; it will become accustomed early to a proper way of thinking and feeling and will then never have any pleasure in idleness. The number of children deserving of compassion who run about under the name of "blackguards" and do not know what to do with their time, would vanish out of sight under this influence. All would strive consciously and unconsciously for the high aim of becoming productive and estimable citizens, and of protecting those who are weaker in their endeavors to seek the same goal.

Honored princess, linger a moment over this picture; find in it the happiness which this method will spread abroad over all conditions of men.

And how much more glorious would be the effect of such schools, when the pupil youth so guided shall become a father, and the young woman educated on these principles shall once be a mother. She will be a true mother; unconsciously and without farther guidance she will impart to her child what is in herself; she will naturally treat and educate her child according to Pestalozzi. Capable young people who feel the calling within themselves can thus cultivate themselves for still higher work, and be useful whether as husbands or fathers by their information, counsel and acts.

Let them unite with some others of the community who are most active for its welfare; let them use this spirit to do good with.

On Sundays and feast-days let them come together, if only a few, to gather the youths and maidens around them; let them invite some of the fathers and mothers to make it more agreeable.

Let the knowledge of the world and of nature be the subject of their conversation, not formally or discursively; no, let it proceed from their own observation and examination how they as well as children learn to occupy themselves from the simplest thing to the most complex. At least let the possibility of the introduction of the Pestalozzian method among the people be shown. By its introduction to the schools its influence among the people will be so much the more secure and rich in consequences.

Upon the Connection of the Elementary Instruction of Pestalozzi with higher Scientific Instruction.

The series of elementary instruction continues uninterruptedly into the higher and scientific.

To represent this progress in detail would carry me too far. Permit me simply to indicate the connection.

Language retains as higher scientific construction both the directions it had taken as elementary instruction.

In one direction, and indeed formally, it rises to the philosophy of language (form is here taken in a wider sense); in the other direction it rises to scientific and artistic representation.

Classification or system proceeds from the description of nature directly, according to one direction; according to the other, the history of the products of nature.

Both run parallel. As the description of nature rises to individual classification, so from natural history proceeds the individual histories of the species.

The description of the surface of the earth becomes in uninterrupted sequence the history of the earth's surface; afterwards it necessarily blends with ancient geography. Since the old geography proceeds according to its elements from the highest point of the earth's surface, this determines the biblical geography to be the beginning of this topic.

Description of men becomes anthropology, physiology and psychology (which must come out of history and through which, first receives here its true meaning) and at last human history. Here first comes the history of individual men, then their history as fathers of families, then the history of the whole family of the people and the nation.

Only biblical history corresponds to this natural continuous progress, since it ascends from the individual to the whole, therefore the beginning would be made with it; in it lies the starting point for farther progress. Here comes in the study and learning of the ancient languages. History and ancient geography now run parallel.

The introduction of the Pestalozzian method of instruction in geography is highly essential to the study of ancient geography.

Arithmetic develops without a break into the mathematics of abstract computable quantities in all its branches.

Geometry develops in a similar uninterrupted succession into the mathematics of fixed magnitudes in its whole extent and all its subdivisions. Knowledge of the elementary powers of nature develops into natural history in the wider sense and in all its compass.

The description of the products of art becomes the history of the products of art in its greatest range.

Elementary drawing rises to drawing as an art and proceeds to plastic representation of different kinds.

The theory of form according to its essence must stand in a higher contact with the æsthetic; their connection is not yet found.

Song rises to art and founds instrumental music in its various forms.

Thus, according to Pestalozzi, the whole is carried out till all these sciences and arts meet again in one point from which they all issued—**MAN.**

The first of this encounter is Philosophy; to recognize it makes the scholar a learned man. When he finds himself at this point, he may determine by himself the direction and aim of his life with clearness and true consciousness.

And thus the Pestalozzian method sets man forth on his endless path of development and culture on the way to knowledge, bound to no time and no space, a development to which there is no limit, no hindrance, no bounds!

A. FROEBEL.

PUBLICATIONS ON PESTALOZZI AND PESTALOZZIANISM.

ABS, JOS. THEOD. Darstellung meiner Anwendung der Pestalozzi'schen Bildungsmethode. Halberstadt, 1811.

— — Pestalozzi's Anstrengungen für Menschenbildung geschichtlich dargestellt. Halberstadt, 1815.

ACADEMICIAN of 1818-19. Pestalozzi—a Series of Articles by a "Citizen of Clinton County." N. Y. A portion Republished in Russell's American Journal of Education for 1829.

ACKERMANN, W. H. Erinnerungen aus meinem Leben bei Pestalozzi. Frankfurt a/M., 1846.

ALBERTI, C. F. R. H. Pestalozzi. In der Sammlung gemeinverständlicher wissenschaftlicher Vorträge von R. Virchow und Fr. von Holtzendorff. (Heft 79.) Berlin, 1869.

ALCOTT A. BRONSON. Pestalozzi, Principles and Methods, 99 p., 1829.

AMERICAN ANNALS OF EDUCATION. Life and System of Pestalozzi, compared with Basedow. Woodbridge, 1837.

AMERICAN JOURNAL OF EDUCATION, ed. by H. Barnard. Pestalozzi and his System.—Papers to the aggregate of 800 pages, in Volumes III., IV., VI., VII., X., XXX, XXXI. Hartford, 1857-1880.

AMOROS. Mémoire, lu à la Société pour l'instruction élémentaire, sur les avantages de la méthode d'éducation de Pestalozzi et sur l'expérience décisive faite en Espagne en faveur de cette méthode. Paris, 1815.

AUCH ANSICHTEN und Erfahrungen über Institute und Schulen, eine Prüfung des Schmid'schen Buches "Erfahrungen und Ansichten." Deutschland, 1811.

AUCH EIN WORT. s. Keller.

AUFFORDERUNGEN und Vorschläge zur Veredlung des Schulund Erziehungswezens. Leipzig, 1800.

AUFSÄTZE. For and against Pestalozzi's System. s. Horner.

D'AUTEL, A. H. Prüfung des Werthes der Pestalozzi'schen Methode. Stuttgart, 1810.

BÄBLER, J. J. Ein bescheidenes Blümchen auf das Grab Pestalozzi's. Glarus, 1846.

BÄBLER. s. Pestalozzi.

BAGGE, E. W. G. Pestalozzi. Frankfurt a/M., 1847.

BANDLIN, DR. J. B. Pestalozzi. Schaffhausen, 1843.

— — Der Genius von Vater Pestalozzi. Zürich, 1846.

BARNARD, HENRY. Pestalozzi, Franklin and Oberlin, true Popular Educators: 24 p. Hartford, 1839. Edition of 1880, 80 p.

— — Pestalozzi's Educational Labors for the Poor, and the Popular Schools, in Barnard's *Reformatory and Preventive Institutions*, 16 p. Hartford, 1847.

— — Pestalozzi and his Method of Instruction, 48 p. Hartford, 1849.

— — Life and Educational Views, from Raumer, 126 p. Hartford, 1857.

— — Pestalozzi and his Assistants and Disciples, 224 p. Hartford, 1853.

— — Pestalozzi and Pestalozzianism, 474 p. 1862.

— — Third Edition, with Fellenberg and Wehrli, p. 528. 1870.

— — — Leonard and Gertrude, translated from Ed. of 1781, 152 p.

— — — Second Edition, with Evening Hour of a Hermit; New Year and Christmas Addresses to his Family, 221 p. Hartford, 1860.

— — Pestalozzi, Fellenberg and Wehrli, in relation to the Industrial Element in Education, 16 p. Hartford, 1861.

— — Pestalozzi and Froebel in Child Culture, 32 p. 1881.

— — Pestalozzi's One Hundredth Birth-Day, and the Literature of Pestalozzianism. Second Edition, 32 p. 1881.

— — Pestalozzi and other Swiss Educators (Zwingli, Calvin, Rousseau, Girard, Fellenberg, Wehrli, Kuratli, Agassiz, etc.). Memoirs and Educational Views, 740 p. Hartford, 1881.

Revised to 1881. Mainly from "Catalogue of Works on Pestalozzi" by A. Schumann, of Zollik, enprinted in *Schweizerische Zeitschrift für Gemeinnützigkeit*. Zurich, 1879.

(BAUER). Pestalozzi der Revolutionär. Von einem Zöglinge desselben. Charlottenburg, 1846.

BELEUCHTUNG der Pestalozzi'schen Grossaprecherien. Erfurt, 1804.

BEMERKUNGEN über Erziehungs-Unterricht. Gewidmet den Gönnern und Beförderern der hiesigen Anstalt nach Pestalozzi'schen Grundsätzen. Bei Gelegenheit der zweiten Prüfung. Basel, 1811.

BERICHT über die Pestalozzi'sche Erziehungsanstalt zu Yverdon an S. Excellenz den Herrn Landammann und die h. Tagsatzung der Schweiz. Eidgenossenschaft. Gedruckt auf Befehl der Tagsatzung. Bern, 1810 (von Girard, Trechsel, Merian).

BIBER, E. Beitrag zur Biographie H. Pestalozzi's. St. Gallen, 1827.

— — Henry Pestalozzi, and his plan of education. London, 1831.

BIOGRAPHIE de Henri Pestalozzi, a. Chavannes.

BITZIUS, a. Gotthelf.

BLACKWOOD'S MAGAZINE. Pestalozziana. Reminiscences of an English Student (before 1818). Vol. 66, 1849.

BLÄTTER, rheinische, für Erziehung und Unterricht. Herausgegeben von A. Diesterweg. Essen. Jahrgänge, 1845—47. Band, 31—36.

— — vorläufige, von den Verhandlungen der schweizerischen Gesellschaft für Erziehung. 1808.

BLOCHMANN, K. J. Heinrich Pestalozzi. Leipzig, 1846.

— — Pestalozzi; Poor School at Neuhof, in Barnard's *Reform's Ed.* 1837.

BONAPARTE, Talleyrand, et Stapfer, 1800—1803. Zurich, 1869.

BORDIER, ancien pasteur, Pestalozzi. Neuchâtel, 1873.

BORNHAUSER, Th. Pestalozzi's Andenken. Gedicht, an der Feier des Vaters Pestalozzi bei seinem hundertsten Geburtstage den 12. Jan., 1846, gesungen von der thurg. Lehrerschaft in Weinfelden.

BREMI, J. H. Ueber die Schrift: Pestalozzi's Erziehungsunternehmung u. s. w. Zürich, 1812.

BRIEFE. s. Pestalozzi.

BROUGHAM, HENRY. Evidence before Education Committee. 1818.

BÜCHI, J. J. Ein Wort über Pestalozzi's Leben und Wirken. Winterthur, 1846.

BÜEL, J. Was soll in den Landschulen der Schweiz gelehrt und nicht gelehrt werden? Winterthur, 1801.

BURGWARDT, HEINRICH. Heint. Pestalozzi. Altona, 1846.

BURKHART, K. F. E. War Heinrich Pestalozzi ein Ungläubiger? Leipzig, '41.

— — Pestalozzi und seine Leistungen nach deren Einfluss auf eine religiöse Volkserziehung. Leipzig, 1846.

BUSINGER. Die Geschichten des Volks von Unterwalden ob und nid dem Wald. 2 Bände. Luzern, 1878.

CHAVANNES, D. AL. Exposé de la méthode élémentaire de Pestalozzi, suivie d'une notice sur cet homme célèbre. Paris, 1805. Vevey, 1806. Nouv. éd. Paris et Genève, 1809.

(CHAVANNES, MLL.) Biographie de H. Pestalozzi. Lausanne, 1833.

CHRISTIAN EXAMINER. Boston. Articles by J. Walker, vi. p. 287; G. Ripley, xi. 347; W. P. Atkinson, lxviii. 63.

CHRISTMANN, W. L. Versuch einer Metakritik der Weltverbesserung oder ein Wort ueber Pestalozzi und Pestalozzismus. Ulm, 1812.

CHRISTOFFEL, R. Pestalozzi's Leben und Ansichten. Zurich, 1846.

COCHIN. Essai sur le vie d'Henri Pestalozzi, p. 96. 1848.

COLLMANN, C. L. Mittheilungen aus dem Leben und den Schriften H. Pestalozzi's, zum Gebrauche in Familien und Schulen. Kassel, 1845.

— — Ein Wort zur Erinnerung an den 100. Geburtstag Pestalozzi's. Kassel, '46.

COMPAYRE, G. Pestalozzi and Rousseau. Histoire Critique de l'Éducation in France. Vol. II. Paris, 1876.

CONRAD, M. G. Pestalozzi. Rede zur Einweihung der deutschen Loge "Pestalozzi" zu Neapel. Leipzig, 1873. Vermuthlich wieder abgedruckt in Conrad: "Vom Reisbrett. Freimaurerische Ansprachen und Skizzen." Zurich, 1875.

- CORRODI. An Vater Pestalozzi, zur hundertjährigen Gedächtnisfeier. Winterthur, 1846.
- CRAMER. Parallele zwischen Sokrates u. Pestalozzi. In der "Pädag. Revue" von Dr. Mager. 15. Bd. Zurich, 1847. S. 265—284.
- CURTSMANN, W. J. G. Eröffnungsrede des im Jahre 1846 begangenen Säkularfestes, der Geburt Pestalozzi's, gesprochen zu Frankfurt a/M., abgedruckt in der "Allgemeinen Schulzeitung" von Zimmermann 1855, Nr. 5. Das Wesentliche davon findet sich bei J. Fölsing, Dr. W. J. G. Curtsmann, Sein Leben und Wirken. Leipzig, 1873.
- CURTI, G. Pestalozzi. Notizie della sua vita e delle sue opere etc. Seconda edizione. Bellinzona, 1876.
- CUVIER, F. Plan d'organisation pour les écoles primaires. Paris, 1815.
- CYCLOPEDIA OF EDUCATION. John Henry Pestalozzi. Steiger, N. Y., 1876.
- DALTON, H. Johannes von Murali. Eine Pädagogen- und Pastorengestalt. Wiesbaden, 1876.
- DIAL for October, 1842, and Jan., 1843. Greaves and Pestalozzi. Boston.
- DIESTERWEG, Kalisch, Maassmann. Die Feier des hundertjährigen Geburtstags Pestalozzi's in Berlin. Berlin, 1845.
- (DIESTERWEG). Ein Wort ueber Pestalozzi und seine unsterblichen Verdienste fuer die Kinder und deren Eltern, etc. 1.—3. Aufl. Berlin, 1845.
- Was wollte Pestalozzi und was wollen wir? Rede bei der Männerfeier. Berlin, 1846.
- Fichte und Pestalozzi. In: 1863! Jahrbuch fuer Lehrer und Schulfreunde. 13. Jahrgang. Frankfurt a/M., 1862. S. 24—63.
- Influence of Pestalozzi on Modern Schools. Hartford, 1862.
- DIETSCHI, P. Das Säkularfest von Vater Pestalozzi, gefeiert in Oensingen von den Lehrern und Schulfreundenden Kantons Solothurn den 12. Januar, 1846.
- Pestalozzi und sein Wirken. Rede, gehalten an seiner hundertjährigen Geburtsfeier den 12. Jan. 1846, zu Oensingen.
- DRIST, K. A. Gottesverehrungen, gehalten im Betsaale des Pestalozzi'schen Instituts zu Iffert. Erstes Heft. Nebst einem Anhang ueber Pestalozzi's Ansichten von der Religion. Zurich, 1812.
- DUVAL. Précis de la nouvelle méthode de Pestalozzi. Paris, 1804.
- EDINBURGH REVIEW. Mayo's Principles of Pestalozzi. Vol. 47, 118. 1826.
- EDUCATIONAL EXPOSITOR. Raumer's Life of Pestalozzi. Translated by J. Tilleard. London, 1853—4.
- EIN ZEUGE DER WAHRHEIT. a. Herder.
- ELDTT, H. L. Erinnerungen an H. Pestalozzi. Königsberg, 1846.
- ERÖRTERUNG der neuern Lage der Pestalozzi'schen Methode. (Ohne Titelblatt in dem Sammelband Gal. XXIV, 1135 der Stadtbibliothek Zurich.)
- EVERS, E. A. Ueber die Schulbildung zur Bestialität. Programm der Kantonsschule in Aarau, 1807.
- EWALD, J. L. Geist der Pestalozzi'schen Bildungsmethode, nach Urkunden u. eigener Ansicht. Zehn Vorlesungen. Bremen, 1805.
- Geist und Fortschritte der Pestalozzi'schen Bildungsmethode. Mannheim, 1810.
- FELLENBERG, E. v. Der dreimonatliche Bildungskurs. Bern, 1833.
- FELLENBERG, WILLIAM DE. Pestalozzi, Fellenberg and Wehrli in relation to Industrial Education, 16 p. Hartford, 1860.
- FESTSCHRIFT zur Einweihung des neuen Schulhauses in Fluntern, 1874. Zurich, 1874. (S. 45 ff.)
- FICHTE, J. G. Reden an die deutsche Nation. 1808 ("Bibliothek der deutschen Nationalliteratur," Bd. 31. Leipzig, 1871).
- FISCHER, E. a. Pestalozzi-Album.
- FISCHER, E. G. Ueber Pestalozzi's Lehrart. In den Abhandlungen der Kgl. Akademie der Wissenschaften und schönen Künste. Berlin, 1803.

FLUNTERN. s. Festschrift.

FROEBEL, F. A. Principles and Method of Pestalozzi. *Barnard's Journal of Education*, 20 p. Hartford, 1881.

FRÖHLICH, EMAN. Zum Andenken des Vaters Pestalozzi, auf die Feier seines Geburtstags (*Gedicht*) 1846.

(GAMPER, W.) Pestalozzi's Idee von der Wohnstube. Zürich, 1846.

GILL, JOHN. Pestalozzi and Pestalozzian System. *Systems of Education*, p. 64-93. London, 1876.

GIRARD, s. Rapport.

GIRAUD, CH. Rapport sur le concours relatif au système de Pestalozzi, (*Séances et travaux de l'Académie des sciences morales et politiques. Paris, 1850. 7^{me} à 9^{me} livr.*)

GÖHRING. Ueber die Einführbarkeit der Pestalozzi'schen Methode in Volksschulen. Stuttgart, 1810.

GOTTHELF, JEREMIAS. Ein Wort zur Pestalozzifeier ("*Pad. Revue*" von Dr. Mager, Bd. 14. Zürich, 1846. S. 49-65).

GRAVES, J. P. Letters of Pestalozzi. London, 1843.

— — Memoir and Letters. London, 1827.

GRISCOM, JOHN. Visit to Yverdon in 1816. *Year in Europe. Vol. I.*, 267.

GRUNER, ANT. Briefe aus Burgdorf über Pestalozzi. Hamburg, 1804. Zweite unveränderte und mit vier neuen Briefen vermehrte Ausgabe. Frankfurt, a/M., 1806.

— — Noch ein Wort zur Empfehlung der kräftigern, namentlich Pestalozzi'schen Weise in der Behandlung und im Unterricht der Jugend. Ein Nachtrag zu den Briefen aus Burgdorf. Frankfurt, a/M., 1806.

GUIMPS, R. DE. Notice sur Pestalozzi. "*Journal d'Yverdon*," 1843.

— — Histoire de Pestalozzi. Lausanne, 1874.

HAGEN. Ueber das Wesentliche der von Pestalozzi aufgestellten Menschenbildungsweise. Erlangen, 1810.

HAGENBACH. Kirchengeschichte des 18 und 19 Jahrhunderts.

HAILMAN, W. N. Pestalozzi, in *History of Pedagogy* 1868.

— — From Pestalozzi to Froebel. Doerflinger, Milwaukee, Wisconsin, 1880.

HAMANN, A. Ueber die Bedeutung der Pestalozzi'schen Elementarbildung in d. Gesammtausbildung d. Menschen. Potsdam, 1846.

HANSEN, H. A. Rede bei der Säkulargeburtsfeier J. Heinrich Pestalozzi's am 12 Januar, 1846. Altona.

HARNISCH, W. Mein Lebensmorgen. Berlin, 1865.

HARTMANN, C. F. Lebensskizze des edlen Menschen- und Kinderfreundes Heinrich Pestalozzi. Reutlingen, 1846.

HARWOCK, G. A. J. H. Pestalozzi. Halle, 1869.

HEER, J. Rede bei der Pestalozzifeier in Wädenswil. Zürich, 1846.

— J. J. Das Wesen der Pestalozzi'schen Methode als Grundlage einer christlichen Erziehung. Zürich, 1870.

— G. Pestalozzi und seine Aussat. Vortrag in Hätzingen. Glarus, 1878.

HEINE, AD. Pestalozzifeier in Hildburghausen. 1846.

HENFEL, C. G. Pestalozzi's Menschenlehre aus seinen "Nachforschungen." Leipzig, 1803.

— — Pestalozzi's Religionslehre. Leipzig, 1804.

HENNING, J. W. M. Leitfaden beim methodischen Unterricht in der Geographie. Iferten, 1813.

HENNING, J. W. M. Mittheilungen über Pestalozzi's Eigenthümlichkeit, Leben und Erziehungsanstalten in Harnisch's "Schulrath an der Oder." 1814 (*Lief. 1*).

— — Monatsblatt f. Pommerns Volksschullehrer. 12 Jahrg., 1846.

HERBERT, J. F. R. Pestalozzi's Idee eines ABC der Anschauung. Göttingen, 1804.

— Ueber den Standpunkt der Beurtheilung der Pestalozzi'schen Unterrichtsmethode. Bremen, 1804.

— Ueber Pestalozzi's neueste Schrift "Wie Gertrud" (*Irene*, 1802), neuerlich mehrfach edit.

HERDER, J. G. Rezension der Schrift "Meine Nachforschungen" in den "Erfurter gelehrten Nachrichten," 1797, St. 60. Werke Band 13. Extra-Abdruck: Ein Zeuge der Wahrheit oder Herder ueber Pestalozzi. Zurich.

HERZOG, K. Joh. Heinr. Pestalozzi im "Neuen Nekrolog der Deutschen." 5 Jahrg., 1827. Ilmenau, 1829. (S. 187—212.)

HEUER, A. Schulgeschichte von Burgdorf. 1874.

HEUSSLER. Pestalozzi's Leistungen im Erziehungsfache. Basel, 1838.

HIMLEY, J. F. W. Versuch einer Einleitung in die Grundsätze des Pestalozzi'schen Elementarunterrichts. Berlin, 1808.

— Beytrag zur nähern Einverständigung ueber die Pestalozzi'sche Methode. Berlin, 1804.

— Pädagogische Mittheilungen. 1 und 2 Stueck. Berlin, 1809.

HOFFMEISTER, H. Comenius und Pestalozzi als Begründer der Volksschule. Berlin, 1877.

HOFFMAN. Ueber Entwicklung und Bildung der menschlichen Erkenntniskraft zur Verbreitung des Pestalozzi'schen Elementarunterrichts. Basel, 1805.

(HÖRNER, J.) Aufsätze für und gegen die Pestalozzi'sche Unterrichtsmethode. Zurich, 1806.

HOTTINGER, J. J. Ein Blick auf einige neuere Verbesserungsversuche des Unterrichts. Zurich, 1809.

— Ein Wort an Prof. Joh. Schultheiss. Zurich, 1810.

— Rektoratsreden. 1813.

— Rede bei der Gedächtnissfeier H. Pestalozzi's, den 12 Jan. 1846 in d. Grossmünsterkirche zu Zurich gehalten. Zurich, 1846.

HUGGER UND STEHLI. Verhältnisse der Zahl nach der Idee der Pestalozzi'schen Methode. Erster Theil, welcher das Kopfrechnen enthält. Gmund, 1815.

— Roman, Theoretisch-praktische Sprachlehre für Elementarschulen nach d. Geiste der Pestalozzi'schen Methode. Ulm, 1818.

HUGGER. Die Elementarschule nach Pestalozzi's Methode. Ulm, 1829.

— C. P. Rede- und Denküebungen für Kinder. Nach der Pestalozzi'schen Methode. Ulm, 1834.

ISELIN, F. Pestalozzi als Förderer der Leibesübungen. Basel, 1858.

ITH, JOH. Amtl. Bericht ueber die Pestalozzi'sche Anstalt. Bern, 1802.

JOHANNSEN, FR. Kritik der Pestalozzi'schen Erziehungs- und Unterrichtsmethode. Jena und Leipzig, 1804.

JULLIEN, M. A. Précis sur l'institut d'Yverdon en Suisse, organisé et dirigé par M. Pestalozzi. Milan, 1812.

— Esprit de la méthode d'éducation de Pestalozzi. 2 Tomes. Milan, 1812.

— Exposé de la méthode d'éducation de Pestalozzi. Paris, 1842.

KALISCH. s. Diesterweg.

KAUFMANN, F. Nachricht von einer Pestalozzi'schen Probeschule. Luzern, 1806.

KEHR, C. J. H. Pestalozzi. Rede am 50 jährigen Todestage Pestalozzi's ("Pädagogische Blätter," 1877, No. 2).

(KELLER, LEONH.) Auch ein Wort aus der Pädagogik von einem Nicht-pestalozzianer. Zurich, 1831.

KELLNER, L. Pestalozzistudien. (In der "Rheinisch-Westfälischen Schulzeitung.") Aachen, 1878.

KNIEWEL, TH. FR. Der Kuntzgeist im Kampfe mit dem Zeitgeist, oder Pestalozzi und seine Wildersacher. Berlin, 1818.

KORRESPONDENZBLATT des Archivs der Schweizerischen permanenten Schulanstaltung in Zurich. Jahrg. 1878 und 1879 (*"Pestalozzi-Blätter"*).

KORTÜM, DR. F. Rückblick auf Pestalozzi, nebst etlichen ungedruckten Blättern desselben. Heidelberg, 1846.

KRAMER, DR. G. A. H. Franke. J. J. Rousseau. Pestalozzi. Berlin, 1854.

— — Karl Ritter, ein Lebensbild. Halle, 1864.

KRAUS, JOHN. Letters on Pestalozzi. 1867.

KRITIK aller Untersuchung der Pestalozzi'schen Methode. Erstes Bändchen. Frankfurt und Leipzig, 1811.

KRÖGER, DR. Mittheilungen ueber Pestalozzi, etc. Hamburg, 1846.

KRÜSI, H. Rede beim häuslichen Gottesdienst, gehalten in der Pestalozzi'schen Erziehungsanstalt. Herten, 1816.

— — Erinnerungen an meinem pädagogischen Leben. Stuttg., 1840.

— — Meine Bestrebungen und Erfahrungen im Gebiete der Volkserziehung. I. Theil. Gais, 1842. II. Theil?

KRÜSI, H. Vaterlehren in sittlichen Wortdeutungen. Ein Vermächtniss von Vater Pestalozzi an seine Zöglinge. Trogen, 1829.

— — Hinterlassene Gedichte, nebst dessen Nekrolog. Heiden, 1845.

— — jun., Poetische Gabe auf Pestalozzi's hundertsten Geburtstag. Z'ch, 1846.

— — Pestalozzi: His life, work, and influence. With portraits and illustrations. New York, 1875.

KRÜSI UND TOBLER. Beiträge zu den Mitteln der Volkserziehung im Geiste der Menschenbildung. I.—IV. Jahrgang. Trogen und Zurich, 1832—35.

LADOMUS. Zeichnungslehre nach Pestalozzi'schen Grundsätzen. Heft 1. Leipzig, 1895.

— — Pestalozzi's Anschauungslehre der Zahlenverhältnisse. Heidelberg, 1807.

— — Pestalozzi's Grundidee der Erziehung und Methode. Heidelberg, 1813.

LANGB. Erinnerungen aus meinem Schulleben. Potsdam, 1855.

LANGB, W. Froebel's Letter on Pestalozzianism. 1809.

LEDDERHOSE. s. Stern

LEHMANN. Pestalozzi; Hauptmomente seiner Methode. Königsberg, 1810.

— — s. Pädagogische Bilder.

LEITCH, J. Henry Pestalozzi. Practical Educationists and their Systems of Teaching, p. 52—120. Glasgow, 1876.

LETTERS on early education. Translated from the German manuscript. With a Memoir of Pestalozzi. London, 1850.

LIEDER, gesammelt zum Gebrauche und nach dem Bedurfnisse der Anstalt zu Herten, 1811.

LUA, A. L. Lieder zum Pestalozzifeste am 12 Januar, 1845. Berlin, 1845.

LÜCKER. Rede bei der Säkulargeburtsfeier Pestalozzi's. Schleswig, 1846.

LUGER, FR. Heinrich Pestalozzi. Hamburg, 1846.

MACLURE, W. Letter on Pestalozzi, 1806. Barnard's Journal of Education, Hartford, 1881.

MANZONI, R. L'istruzione del popolo. Brevi osservazioni sul sistema Pestalozziano. Bellinzona.

MARGGRAF, H., Schiller, Lessing, Pestalozzi. Prolog. Leipzig, 1861.

MASSMANN, H. F. Ernstes u. Heiteres z Pestalozzifeste. Berl., 1846.

MAYO, C. Pestalozzi and his principles. London, 1825. Third edition, 1873.

— — Pestalozzi and other Papers. London: 1836.

MERKUR, der deutsche (*Artikel über Pestalozzi von Wieland*). 1801.

MEYER, JER. Wie Herr Jos. Schmid die Pestalozzi'sche Anstalt leitet. Stuttgart, 1822.

MEYER, JER. Aux amis de Pestalozzi. Réponse aux injures de Josef Schmid. Paris, 1823.

MEYER, J. F. E. Pestalozzi als Mensch, Staatsbuerger und Erzieher mit seinen eigenen Worten geschildert. Eutin, 1850.

MEZGER, G. C. Zur Erinnerung an Herder und Pestalozzi. Augsburg, 1854.

MICHAELIS, G. F. Pestalozzi's Elementarunterricht umfassend dargestellt und erläutert. Leipzig, 1804.

MÖNNICH, W. B. J. H. Pestalozzi nach ihm selbst und Andern geschildert (in den "Zeitgenossen." Leipzig, 1831).

— — Jugend- und Bildungsgeschichte merkwürdiger Männer und Frauen. Nürnberg, 1841 (Bd. I, S. 180-226).

— — Pestalozzi's Idee der Menschenbildung in ihrer Entwicklung und Bedeutung. Nürnberg, 1845.

MÖRIKOFER, J. C. Heinrich Pestalozzi und Anna Schultheiss (im "Zürcher Taschenbuch," vom 1859). Zürich, 1859.

— — Die Schweizerische Literatur des 18 Jahrh. Leipzig, 1861.

MONNARD, CH. Notice sur Pestalozzi (d. la "Revue encyclopédique de Paris." Band 36, S. 295-305). 1827.

— — Histoire de la Suisse (Fortsetzung von Joh. v. Müller).

MORF, H. Zur Biographie Pestalozzi's. Winterthur, 1868 ff.

— — Vor 100 Jahren. Winterthur, 1867.

— — Pestalozzi in Spanien. Winterthur, 1876.

— — Ist Volksbildung wirklich Volksbefreiung? In: "Die deutsche Schule," herausgegeben von Nostiz. Erster Jahrgang, 1875. Heft I, III-V. Neuwied und Leipzig.

— — Votum in der Kindergartenfrage. Uster, 1876.

MÜLLER, F. J. Blätter für Nationalbildung und Privaterziehung. Beyträge zur Berichtigung des Urtheils ueber Pestalozzi, seine Methode und sein Institut. Passau, 1804.

— W. CH. Erfahrungen ueber Pestalozzi's Lehrmethode; eine Vorlesung im Bremischen Museum. Jetzt auf besondere Veranlassung erweitert. Bremen, 1804.

— — Flug von der Nordsee zum Montblank (Bd. I, S. 275 ff. über Pestalozzi). Altona, 1821.

MÜNCH, MATTH. KORN. Biographien ausgezeichneter um die Menschheit verdienter Pädagogen. Augsburg, 1845.

MUSEUM. Pestalozzi and Fellenberg. London: 1862.

NÄGELI, H. G. Erklärung an Hottinger als Ankläger der Freunde Pestalozzi's. Zürich, 1813.

— — Die Pestalozzi'sche Gesangbildungalehre nach Pfeiffer's Erfindung kunstwissenschaftlich dargestellt. Zürich.

— — Pädagogische Rede (enthaltend eine Charakteristik Pestalozzi's, etc.). Zürich, 1830.

NÄGELI, H. G. Pädagogisches Memorial der Verfassungskommission des Kantons Zurich eingereicht. Zürich, 1831.

NEUMANN, C. H. Ueber die jetzt eingeleitete Verbesserung des Elementar-Schulwesens in der Preussischen Monarchie. Potsdam, 1811.

NICOLIOVIUS, D. A. Denkschrift auf G. H. L. Nicolovius. Bonn, 1841.

NIEDERER, DR. J. Briefe von 1797-1803 an seinen Freund Tobler. Genf, 1845.

— — Erklärung ueber die Rezension der Pestalozzi'schen Methode (im Intelligenzblatt der "Jena'schen Allg. Literaturzeitung." Nr. 71). 1804.

— — Prospekt des Pestalozzi'schen Instituts zu Muenchenbuchsee, in Ver- bindung mit den Erziehungsanlagen zu Hofwyl, 1805.

— — Ankuendigung einer Wochenschrift für Menschenbildung Lausanne, 1806.

— — Das Pestalozzi'sche Institut an das Publikum. Mit einem Briefe Pestalozzi's als Vorrede. Herten, 1811.

NIEDERER. Pestalozzi's Erziehungsunternehmung im Verhältnisse zur Zeitkultur. 2 Bde. Stuttgart, 1812, 1813.

— Schliessliche Rechtfertigung des Pestalozzi'schen Instituts gegen seine Verläumder. Iferten, 1813.

Jesus Christus der Gesetzgeber. 1816.

— Pestalozzi'sche Blätter für Menschen- und Volksbildung. 1 Bd., 4 Hefte u. 2 Bd., 1 u. 2 Hft. Aachen 1828-29.

— Rosette, Dramatische Jugendspiele für das weibliche Geschlecht. Aarau, 1828.

— — Blicke in das Wesen der weiblichen Erziehung. Berlin, 1828.

— und PESTALOZZI. Wochenschrift für Menschenbildung, herausgegeben von Hch. Pestalozzi und seinen Freunden. 4 Bde. Aarau, 1807-1811.

NIEMEYER, A. H. Ueber Pestalozzi's Grundsätze und Methoden. Halle, 1810.

NOACK. Heinrich Pestalozzi. Leipzig, 1861.

NODDAGE, A. Pestalozzi. In: "Die Männer des Volkes," dargestellt von Freunden des Volks. Herausgegeben von Ed. Duller. 1 Bd. Frankfurt a/M., 1847. S. 103-144.

NOTICE sur l'école du premier degré, fondée et dirigée par A. Boniface, disciple de Pestalozzi. Paris, 1823.

OPPEL, C. J. H. Pestalozzi's Leben, Wollen und Wirken. Frankfurt a/M., 1845.

PÄDAGOGISCHE BILDER, von Jul. Lehmann. Mit Vorwort von Zoller. Bern, 1836.

PALMER, CHEN., Dinter und Pestalozzi. "Schulblatt für die Provinz Brandenburg," 1855. S. 162-210.

— Evangelische Pädagogik. Stuttgart, 1853.

— Artikel "Pestalozzi" in Schmid's pädagogischer Encyclopädie.

PAROZ. Pestalozzi, sa vie, sa méthode, etc. Bern, 1857.

— Histoire universelle de la pédagogie. Paris, 1868.

PASSAVANT, E. W. Darstellung und Pruefung der Pestalozzi'schen Methode nach Beobachtungen in Burgdorf. Lemgo, 1804.

PAYNE, JOSEPH. Pestalozzi and his System. London, 1868.

PESTALOZZI, HEINRICH. Sein Leben und Wirken einfach und getreu erzählt für das Volk. Herausgegeben von der zuerch. Schulsynode (verf. von Kaspar Bär). Zurich, 1846.

— — nach seinem Gemueth, Streben und Schicksalen, aus dem Französischen uebersetzt. Aarau, 1844. (*Uebersetzung von de Guimps, Notice.*)

— — der Revolutionär, s. Bauer.

— — Hch. Pestalozzi's unedirte Briefe und letzte Schicksale. Bern, 1834.

PESTALOZZI'S Idee der Menschenbildung, s. Mönlich.

— Lehrsystem wissenschaftlich dargestellt (in der "Jena'schen Allg. Literaturzeitung," I. Jahrgang, 1804, 1 und 2 Band Nr. 59 ff., 98 ff.).

— Methoda. Kurze und faessliche Darstellung derselben. Stuttgart, 1810.

PESTALOZZI. Ueber das Eigenthuemliche der Pestalozzi'schen Methode. Tuebingen, 1810.

In: Bildnisse und Lebensbeschreibungen der berühmtesten und verdienstvollsten Pädagogen und Schulmänner älterer und neuerer Zeit. Quedlinburg u. Leipzig. Liefg. 1, 1833.

PESTALOZZI'S neue Methode, die alten Sprachen zu lehren. Von einem Mitarbeiter in ihren Grundzügen dargestellt. Karlsruhe, 1818.

PESTALOZZI und seine Bedeutung für unsere Zeit. In: "Die Gegenwart." 3 Bd. Leipzig, 1849. S. 331-342.

— In: Schulkalender aus Franken für 1861. 1 Jahrg. Wuerzburg.

— H. Neujaersblatt des zuerch. Waisenhauses. 1847.

PESTALOZZI'S Biographie im Pestalozzi-Kalender auf das Jahr, 1847. Dresden.

PESTALOZZI-ALBUM. Zum Besten hilfsbedürftiger Lehrerwaisen im Kgr. Sachsen, herausg. von E. Fischer. Dresden, 1852.

PESTALOZZIANA, s. Scheidler.

PESTALOZZI-FEIER in Basel, s. Vorträge.

— in Basel. Gedicht von einem seiner Schueler. Mittheilungen Nr. 5 vom 13 Januar, 1846.

— in Brandenburg. 1846.

— in Bernberg. 1846.

— in Dresden. Leipzig, 1846.

— in Erfurt, s. Thilo.

— in Hamburg. 1846.

— in Hildburghausen, s. Heine.

— in Kiel. 1846.

— in Königsberg. 1846.

— in Planen. 1846.

— in St. Gallen. 1846.

— Ein Wort an die Schullehrer des evangelischen Theils des Kantons St. Gallen vom evangel. Erziehungsrath, auf den 12 Januar, 1846.

— in Wädenswil. 1846, s. J. Heer.

— in Weinfelden, s. Bornhauser.

— in Winterthur, s. Buechi, Gamper, Corrodi (W.).

— — Lieder zur hundertjährigen Gedächtnisfeier. 1846.

— — Pestalozzi in Unterwalden (Gedicht).

— in Zurich, s. Hottinger.

PESTALOZZITAG, die Feier desselben vor deutschen Frauen. Vorträge und Reden zur Frauenfeier seines 100 jährigen Geburtstags. Berlin, 1846.

PESTALOZZI und der Pestalozzi-Verein. Aarich, 1846.

— in Leipzig. Festsede. In den "Leipziger Blättern für Pädagogik" 3 Heft. Leipzig, 1870.

— in Spanien, s. Morf.

— Heinrich, Dramatische Vorstellung zum 50 jährigen Jubiläum des Ländtlicher-Institutes in Zurich. Zurich, 1861.

PESTALOZZI-STIFTUNG in der deutschen Schweiz. Statutenentwurf. 1845.

— in Olsberg. Berichte, 1853, ff.

— — für Knaben bei Schlieren. Berichte, 1869, ff.

— — die deutsche. Rechenschaftsberichte, 1847, ff.

PETITAIN, Précis de la nouvelle méthode de Pestalozzi. Paris, 1804.

PLAMANN, J. E. Einzige Grundregel der Unterrichtskunst, nach Pestalozzi's Methode angewandt in der Naturgeschichte, Geographie und Sprache. Halle, 1805.

PLAMANN, J. E. Beiträge zum Verständniss der Pestalozzi'schen Methode. Leipzig, 18'2.

POMFÈRE, Etudes sur la vie et les travaux de Pestalozzi. Paris, 1850, 1878.

PREUSSISCHES VOLKSSCHULWESEN, s. Thilo.

PROBST, JOSEF. Die wichtigeren pädagogischen Grundsätze von Pestalozzi. Liestal, 1846.

QUICK, R. H. Pestalozzi—in Educational Reformers. London, 1868.

RAM-AUER, J. Zeichnungslehre. Stuttgart u. Tuebingen, 1821.

— In: Diesterweg, das pädagogische Deutschland. Berlin, 1835.

— Kurze Skizze meines pädagog. Lebens. Mit besond. Berücksichtigung Pestalozzi's u. seiner Anstalten. Oldenb., 1838.

— — Buch der Mutter. Die Liebe in Erziehung und Unterricht. Zum Andenken Pestalozzi's. Elberfeld und Meurs, 1846. Mit 27 Figurentafeln.

RAMSAUER und ZAHN. Pestalozzi'sche Blätter. Elberfeld u. Meurs, 1846.
RAPPORT sur l'Institut de M. Pestalozzi à Yverdon. Fribourg, 1810 (*par le père Girard; deutsch s. Bericht*).

RAUMER, K. V. Geschichte der Pädagogik. II. Thl. Stuttgart, 1857.

RENDSCHMIDT. Rede gehalten am Pestalozzifeste zu Breslau, 1846.

RIEDEL, KARL. Wie Gertrud ihre Kinder lehrt. Wien, 1877.

RIEL. Würdigung der Pestalozzi'schen Methode, wie sie Niederer darstellt. Gotha, 1808.

ITTER, K. Schreiben eines Reisenden ueber P. und seine Lehrart. In: Gutsmuths "Neue Bibliothek für Päd." 1808, I, S. 112 bis 130 u. in: Zerrenger, "N. Schulfreund," 15 Bdch. S. 1-50.

ROBIDÉ VAN DER AA, C. P. E. Pestalozzi's leven en lotgevalen. Arnheim, 1846. Mit Bild.

ROSENKRANZ, K. Pestalozzi. Rede zur Festfeier seines 100 jähr. Geburtstages. Königsberg, 1846.

RUGAARD, DR. E. Skole Reformatorer J. H. Pestalozzi Hundred-Aars Mindefest i Danmark. Kjöbenhavn, 1846.

SALLWÜRK, T. V. Pestalozzi's Vermächtnisse. In: "Jahrbuch des Vereins für wissenschaftliche Pädagogik." 6 Jahrgang. Herausgegeben von T. Ziller. Leipzig, 1874. S. 1-15.

(SCHEIDLER.) Pestalozziana. Aus dem Januarheft der "Minerva." 1846.

SCHENKEL, DR. DAN. Joh. Heinrich Pestalozzi. Heidelberg, 1863.

SCHNEUENSTUHL, J. P. Pestalozzi Verhältniss zum modernen Leben und zur modernen Wissenschaft. Ein Vortrag im Lehrerverein zu Nuernberg. Ansbach, 1846.

SCHLEGEL, J. J. Drei Schulmänner der Ostschweiz. Lebensbild von J. R. Steinmueller und biographische Skizzen ueber H. Kruesi und J. J. Wehrli. Zurich, 1879.

SCHMID, K. A. Pädagog. Encyclopädie, s. Palmer.

— JOSEPH, die Elemente der Form und Grösse nach Pestalozzischen Grundsätzen bearbeitet. 2 Thle. Bern, 1809.

— — die Elemente des Zeichnens nach Pestalozzi'schen Grundsätzen bearbeitet. Bern, 1809.

— — die Elemente der Zahl als Fundament der Algebra, etc. Heid'g, 1810.

— — Erfahrungen und Ansichten ueber Erziehung, Institute und Schulen. Heidelberg, 1810.

— — Rede gehalten am 74. Geburtstag P.'s. Zurich, 1818.

— — Wahrheit u. Irrthum in P.'s Lebensschicksalen. Iferten, 1822.

— — Fallenberg's Klage gegen Pestalozzi. Karlsruhe, 1827.

— — Einladung zur Subskription auf Pestalozzi's Schriften, welche in drei Sprachen publizirt werden sollen.

— — Pestalozzi und sein Neuhof. Zurich, 1847.

SCHMIDT, E. Schule der Erziehung in biographischen Umrissen. Berlin, 1846.

— FERD. Heinrich Pestalozzi. Berlin, H. Kastner (*Jugendschrift*).

— J. F. Pestalozzi's Grössenlehre als Fundament der Arithmetik und Geometrie betrachtet. Halle, 1805.

— DR. K. Geschichte der Pädagogik; 2 Aufl. Herausgegeben von Dr. W. Lange. Köthen, 1867.

SCHNEIDER, K. Rousseau und Pestalozzi. Bromberg, 1866. 2 Aufl., 1873.

SCHNELL. Bezirksstatthalter in Burgdorf, an seinen Freund K. ueber Pestalozzi's Lehranstalt. Bern, 1800.

— F. Aus dem Leben eines preussischen Schulmanns der Pestalozzi'schen Schule. Leipzig, 1863.

SCHORN, A. Joh. Heinrich Pestalozzi. In: "Geschichte der Pädagogik in Vorbildern und Bildern." Leipzig, 1873. (7 Aufl., 1879.) S. 197-221.

- SCHORNSTEIN, R. Pestalozzi's Mission a. d. Muetter. Elberf., 1856.
- SCHULLEHRER, der, des 19 Jahrhunderts. 2 Bd. 2 Aufl. Stuttgart, 1839.
Enthält u. A.: Die Pestalozzi'sche Familie. Geschichte des Anschauungs-
unterrichts. I. Pestalozzi.
- SCHULTHESS, J. Genauere Finsidht der neuesten Versuche einer bessern
Erziehung und Bildung der Jugend. Zurich, 1810. (*In Band IV von:*
Schultheß, Beiträge zur Kenntniss und Förderung des Kirchen- u. Schulwesens in
der Schweiz. S. 65.)
- SCHWARZ, F. H. E. Pestalozzi's Methode und ihre Anwendung in Volks-
schulen. Bremen, 1803.
- SEYFFARTH, L. W. Pestalozzi's sämtliche Werke, gesichtet, vervollständigt
und mit erläuternden Einleitungen versehen. 16 Bde. und 2 Bde.
Nachträge. Brandenburg, 1869 ff.
- — Pestalozzi nach seinem Leben und auf seinen Werken dargestellt.
6 Aufl. Leipzig, 1876.
- — Pädagogische Reisebriefe (im "Proussischen Schulblatt"). Berlin,
1871/72.
- SIGIST, H. Briefe an Schmid uebes seine Erfahrungen und Ansichten.
Luzern, 1811.
- SMETHLAGE. Bemerkungen ueber P.'s Lehrmethode. Berlin, 1803.
- SOYVAUX. Pestalozzi, seine Lehrart u. seine Anstalten. Leipzig, 1803.
- STAHL, Madame de, de l'Allemagne.
- STEINMÜLLER, J. R. Bemerkungen gegen Pestalozzi's Unterrichtsmethode
Zurich, 1803.
- STERN, nach seinem Leben und Wirken geschildert von K. F. R. Ledderhose.
Heidelberg, 1877.
- STOLZENBURG, W. A. H. Geschichte des Bunzlauer Waisenhauses. Breslau,
1854.
- STRÖM. Précis succinct de la méthode d'instruire de Pestalozzi. Kopen-
hagen, 1805.
- SÜSKIND, F. G. Ueber die P.'sche Lehrmethode. Stuttg., 1809.
- THAULOW, DR. G. Rede bei der Säkular- und Geburtstagsfeier Pestalozzi's.
Kiel, 1846.
- THILO, W. Reden und Gesänge bei Pestalozzi's Säkulargeburtstagsfeier im kgl.
Seminar zu Erfurt. Berlin, 1806.
- — Proussisches Volksschulwesen nach Geschichte u. Statistik. Gotha,
1867. (*Vgl. dagegen "Rheinische Blätter," 1868 u. 69.*)
- DU THON, ADELÉ. Notice sur Pestalozzi. Genf, 1827.
- TILLEARD, J. Life and Educational System of Pestalozzi. London, 1855.
- TILLICH, E. Analyse der Pestalozzi'schen Schrift: "Wie Gertrud ihre
Kinder lehrt," und ueber den eigenthümlichen Charakter der Pestalozzi'schen
Lehrart. In: Beiträge zur Erziehungskunst von Weiss u. Tillich. 2 Bde.
Leipzig, 1803 und 1806.
- — Pestalozzi's Rechenmethode und Schmid's Elemente der Zahl. Stutt-
gart, 1810.
- TORLITZ, J. H. A. Reise in der Schweiz. Veranlastet durch Pestalozzi u.
dessen Lehranstalt. Kopenhagen u. Leipzig, 1807.
- TRAPP, E. CHN. Ueber Pestalozzi in Briefen an Biester. In: "Neue
Berlinerische Monatschrift." Novbr., 1804 (S. 321 bis 346), Juni, 1805 (S. 424).
- TÜRK, W. VON Briefe aus Muenchenbuchsee ueber Pestalozzi und seine
Elementarbildungsmethode. 2 Thle. Leipzig, 1806.
- — Ueber zweckmässige Einrichtung der öffentlichen Schul- und Unter-
richtsanstalten, mit vorzüglicher Rucksicht auf Mecklenburg. Neu-Strelitz,
1804.
- — Nachricht von den in Oldenburg angestellten Versuchen Pestalozzi-
scher Lehrart. Oldenburg, 1806.

- TÜRK, W. VON. Beiträge zur Kenntnis einiger deutscher Elementar-Schulanstalten. Leipzig, 1806.
- — Leben u. Wirken d. Reg.- u. Schulraths Tuerk. Potsdam, 1859.
- VATERLEHREN, S. Krusi.
- VERHANDLUNGEN der Schweizerischen Gesellschaft für Erziehung. 1812.
- VOCK, AL. Zum Andenken Pestalozzi's. In den Verhandlungen der helvetischen Gesellschaft 1827 (S. 20-41).
- VORTRÄGE an der Pestalozzifeier in Basel von Heussler, Lehmann, etc. Basel, 1846.
- VULLIEMIN, L. Souvenirs. Lausanne, 1879.
- WANDER, K. FR. W. Ueber P.'s Brfolgung der Lehre Jesu. In: "Schlesische Provinzialblätter." Bd. 123 (1846 *Februarheft*).
- WEISS, DR. CH. Vorschlag zu einem Denkmal Pestalozzi's. Merseburg, 1846.
- WIELAND, S. Merkur.
- WIESINGER, J. Pestalozzi's Antheil an der Erneuerung des deutschen Volkes. Kissingen, 1873.
- WITTE, KARL. Bericht an S. Majestät von Preussen neber das Pestalozzi'sche Institut in Burgdorf, Leipzig, 1805.
- WOCHENSCHRIFT, S. Niederer.
- WOODHIDGE, W. C. Pestalozzi—Life and Principles. Boston, 1837.
- ZAHN, Schulchronik, Nr. 1. 1846.
- ZEHNDER, JOS. Geb. Stadlin, Pestalozzi, Idee und Macht der menschlichen Entwicklung. Erster Band. Gotha, 1875.
- ZELLER, C. A. Historische Nachricht von einem Versuch neber die Anwendbarkeit de Pestalozzi'schen Lehrart in Volksschulen. Tübingen, 1804. Neue Auflage, 1810.
- ueber Sonntagschulen nach Pestalozzi'schen Grundsätzen. Leipzig, 1804.
- historisch-kritischer Bericht ueber das Normalinstitut f. d. Landschullehrer d. Kts. Zurich i. Riedtli b. Zurich. Winterthur, 1807.
- Die Grundlage einer bessern Zukunft. In Briefen an die Fuerstin von Lippe-Detmold. Zurich, 1808.
- ZESCHWITZ, G. V. Der Pädagog Hch. Pestalozzi. Erlangen, 1871.
- ZÖLLNER, J. C. Ideen ueber Nationalerziehung. Berlin, 1804.
- ZOLLER, DR. FR. Rousseau und Pestalozzi. Frankfurt a. M., 1851.
- ZACHORKE, HCH. Historische Denkwürdigkeiten der helvetischen Staatsumwälzung. 1804.
- — Zwei Briefe ueber Pestalozzi's Leben und Lehre an einen Mann von Stande ("Isis" 1805, S. 695).
- — Physiologische Umriss einiger ausgezeichneten Schweizer (*Miszellen* 1809, S. 333).
- — Ueber Heinrich Pestalozzi und die Ausgabe seiner Werke ("Uebersetzung zur Geschichte unserer Zeit, gesammelt von H. Zachorke," Jahrgang, 1807, S. 359-366).
- — Erinnerungen an H. Pestalozzi (In: "Prometheus für Licht und Recht," 1 Tbl. 1832, S. 245-261).
- — Selbstschau. Aarau, 1842.

Reader:—Please to communicate any omission in the foregoing list known to you to Henry Barnard, Hartford, Conn.

that his hours of musing were occupied with the plan that was forming within him for the early instruction of little children. It was now clear to him that the elevation of all education, that of the earliest childhood as the most important time for human development was indispensable, and that in its behalf play, as the first activity of the child, must be spiritualized and systematically treated. *The idea of the Kindergarten* rose upon him;* he wrote to Berlin for his first materials for plays and occupations, and immediately formed the purpose of founding an institution for the care of the earliest childhood. He selected for this new institution the little town of Blankenburg, on the Schwarze, at the entrance of the so-called Thuringian-Switzerland—a place which, on account of its healthy, beautiful situation, was particularly suitable for his sweet wife. In 1837 the institution was founded. In 1838 Froebel issued from Blankenburg a paper entitled '*Seeds, Buds, Flowers, and Fruits out of Life, for the Education of United Families.*' A Sunday issue was under the call: 'Come, let us live with our children.'

"This year, the year 1838, in reference to the system of Froebel in general, and the Kindergarten in particular, is a classical year, and should be so called, and the paper must here be recommended to readers to whom it is destined to give a fundamental conception of this pedagogic innovation. It contains an exposition of the great principles of the system, and a development of the material for play in its natural necessity and its harmonic connection. The new idea of the Kindergarten drew all the friends of Froebel again around him. Langenthal left Ferdinand Froebel to conduct the orphan home in Burgdorf, and went to Blankenburg, Middelndorf left Willisau and returned to Keilhau, into the lap of his family, which had long missed the loving father. Froebel, in 1839, in company with Frankenberg, responded to a call from Dresden to speak upon his educational principles, especially to present his idea of the Kindergarten. We know that the seed fell upon good ground in that city. During his residence in Dresden his wife died; one of those rare women who served an idea at the greatest possible sacrifice, that of her life. She lived to see the Kindergarten idea accepted through the representations of her husband, and parted from him satisfied. After this deep wound,—the bitterest experience to him—had done bleeding, the veteran worked on actively, and repeated at Hamburg what he had said in Dresden. A great purpose now took possession of his soul. He had not as yet an institution in which his system could be presented in its whole comprehensiveness, and which should at the same time secure the further development of his work for the young. Here and there were institutions in Froebel's sense, and also Kindergartens; but a central point was wanting, a heart from which life flows into all the limbs, in order to throw it back again to the source."

(To be continued.)

* Prof. Payne presents his conception of the genesis of the Kindergarten in Froebel's meditations and experience, very happily in his *Lecture.—Froebel and the Kindergarten.*

THE KINDERGARTEN—ITS GENESIS AND NAME.*

To Froebel, the friend of children, to whom the childish nature readily and willingly revealed itself, was it given to find, in the very growth of the child, the natural way of development. Long years of loving observation taught him that the individual inner life of the child reveals itself nowhere more freely and perfectly than in play. He wished to apply his means of development to the personality, as it makes its appearance in self-activity, and this could happen only in play. With this his problem was solved at once. He had only to allow the child to play; to give him suitable materials for it; to find proper games to teach the child and his companions, and to prepare them by degrees for useful occupations, and eventually for real work, by methodically arranged gradations. Of this we will hear him speak. In a letter to Barop, written Feb. 18, 1830, he says: "During the short time employed in writing these lines the thought of my and our educational work has essentially unfolded itself, while it has gone further back in respect to its application, and grounded itself so much the more deeply. The education and training of little children from three to seven years old has occupied my mind for a long time. A multitude of thoughts and influences crowding upon me at once decided me to establish an institution for the care and development of orphan and motherless children of both sexes, of the ages above-mentioned." This thought appears much more clearly in a letter from Burgdorf, Switzerland, written March 1, 1836, in which he announces to the educational circle at Keilhau that he has decided to found an institution for instruction in the art of accurate observation, leading to self-improvement, through play and occupation. In the course of the letter he says further:

"For a long time I have cherished the thought of making my means of facilitating accurate observation for culture and instruction complete and universal by a multiplication and publication of the same. Only since the end of the last year, and especially since the beginning of this, do my circumstances and relations permit the carrying out of this undertaking. I consider and order my whole life in reference to it since I have taken the decided resolution and formed the plan; first to perfect all my methods of facilitating accurate observation, of teaching, instruction, and culture, into many series following each other, separated into members, but vitally connected in the form of children's plays, and as a means of self-occupation and self-information through observation and creation, through a varied self-activity, and therefore through a methodical and legitimate satisfaction of the instinct for culture in the child. My undertaking differs very essentially from all similar ones already introduced, in its spirit, in its inner qualities, in its unity, from which everything proceeds, and in conformity to the laws of life, according to which all manifoldness is revealed, in its inner vital coherence; in a word, in the many-aided human scientific, as well as practical, foundation." Then follows the further presentation of the peculiarities of the system. Soon after

* By Ferdinand Winther, in *Diesterweg's Wegweiser*.—Edition of 1876. Translated by Miss Lucy Wheelock, of the Chauncy-Hall Kindergarten, Boston.

this private announcement there followed, in the *Sonntagsblatt*, in 1838, a public request that families should unite to carry out the motto of this paper, "Come, let us live with our children." He says therein,

"As this paper is designed, first of all, to explain and introduce the proposed institution, it begins immediately with the foundation of the whole. In the germ of every human being lies embedded the form of its whole future life. On the proper comprehension and care of this beginning depends solely the happy unfolding of the man leading to perfection, and the ability to accomplish his destiny, and thus to win the true joy and peace of life. The active and creative, living and life-producing being of man, reveals itself in the creative instinct of the child. All human education and true culture, and our understanding also, is bound up in the quiet and conscientious nurture of this instinct of activity, in the family; in the judicious unfolding of the child, to the satisfaction of the same, and in the ability of the child, true to this instinct, to be active."

Froebel's practical experiment with the Kindergarten in Blankenburg was received at first with doubtful smiles. But when the people saw with what joyful zeal children of every age, after a short time, pressed to the merry sports, in the invention of which Froebel was inexhaustible, and in the guidance of which he was a master; when the children took home their ornamental sewing and weaving, where, contrary to their former habits, they devoted themselves, of their own free will, to entertaining occupations, then, with their growing understanding of the system, the parents began to appreciate it, and doubt changed to true interest in Froebel's young creation. In the midst of this activity, full of life and experience, the idea of the Kindergarten grew clearer and fuller in Froebel's mind, so that in 1840, at the Gutenberg festival, which the educational institutions for children and youth in Blankenburg and Keilhau celebrated in common, he could present a new and more comprehensive plan, which he hoped to call into life with the help and participation of the German people.

Appeal to the Women of Germany in 1840.

One cannot read without admiration and emotion the words with which, in his speech at the festival, he tried to win the German women for his work. "Therefore, I dare," he said, toward the end of his speech, "confidently to invite you who are here present, honorable, noble, and discreet matrons and maidens, and through you, and with you all women, young and old, of our fatherland, to assist by your subscription in the founding of an educational system for the nurture of little children, which shall be named Kindergarten, on account of its inner life and aim, and German Kindergarten, on account of its spirit. Do not be alarmed at the apparent cost of the shares; for if you, in your housekeeping, or by your industry, can spare only five pennies daily, from the presumptive time of the first payment until the end, the ten dollars are paid at the last payment. Do not let yourselves be kept from the actual claims of the plan by the contemptible objection 'Of what use to us is it all?' Already the idea of furthering the proper education of the child through appropriate fostering of the instinct of activity, acts like light and warmth, imperceptibly and beneficently, on the well-being of families and citizens; how much

greater than are the possibilities of the daily, or even weekly, or monthly, attendance at such an institution. Staying here for a few hours has a good and blessed influence for days, weeks, months, and years; for good is not like a heavy stone which only acts, and is perceived where it presses; no—it is like water, air, and light, which invisibly flow from one place to another, awakening, watering, fertilizing, nourishing what is concealed from the searching eye of man,—even slumbers in our own breasts unsuspected by ourselves. Good is like a spark which shines far and points out the way and direction. Therefore, let us all, each in his own way, advance what our hearts recognize as good—the care of young children. Do you ask for the profits of your investment; in technical language, the dividends on your shares? Open your eyes impartially, your hearts also; there is more in it than we have represented in the plan of the undertaking. Or, is the beautiful any less a gift and a real value in our life because it passes away easily? Is the good also any less a gift because only the heart perceives it? Is the true any less a gift because it is unseen, and only the spirit observes it? And shall we count for nothing the reaction on the family weal, and the happiness of the children, in joy of heart and peace of mind? You can enjoy these great gifts in full measure; for they are the fruit of your coöperation, the fruits of the Garden which you establish and care for,—the fruits of your property. Besides, is it not almost more than this to take the lead and stand as models for a whole country, to advance the happiness of childhood and the well-being of families throughout an entire nation?"

Universal German Institution.

Froebel was not deceived in his deep, unshaken confidence. Owing to the deeply-felt need of suitable training for children before their entrance into school, the Kindergarten was founded as a Universal German Institution at the Guttenberg festival in 1840, a day which pointed to a universal breaking of the light, and in his report of June, 1843, which is signed by the burgomaster Witz, as well as by Middendorff and Barop, Froebel could announce good results of his effort and a general and honorable recognition. In order to kindle the sparks of appreciation glimmering here and there into a clear flame by the breath of his own never-failing enthusiasm, he proposed to visit all the larger cities of Germany. He succeeded, especially in Hamburg and Dresden, in winning laborers for his vineyard, and in establishing Kindergartens. The seed-corn which he thus scattered fell in good soil, and grew to flowering plants through the faithful care of his pupils and adherents.

Mother. Play and Nursery Song. Sonntagsblatt.

Of his literary works of this time, two, devoted to the pedagogics of the Kindergarten, deserve especial mention. *Die Mutter- und Kosselieder* is so called from the little rhymes which Froebel gives the mother to sing or repeat in order to occupy and entertain profitably her child from one to two years old, with all kinds of sports and plays, when dressing and undressing, washing, eating, etc. The little arms and legs, hands and fingers, play the principal part; they learn to do little feats, to manage and move themselves, and are strengthened by exercise. Many occur.

rences also of domestic life or those nearly allied, are judiciously illustrated by picture and song. This method happily discovered by Froebel has since received the highest artistic development through Richter and Oscar Pletsch. The *Sonntagsblatt* (1838-1840) has a special value from the fact that Froebel published in it his "play-gifts" which characterized the Kindergarten and its method of culture, explained their meaning, and described their use. A comparison of Froebel's play-gifts with those which from year to year competitive industry offers so richly—not exactly for the benefit of the world of children—first shows them in their true light. Almost all the playthings which we buy in our toy-shops filled with all possible expense, are finished and perfect in themselves, often perfectly constructed objects whose beauty cannot be denied. Children stand amazed and delighted at the sight of a Christmas table ornamented with such gifts. But how long does the joy last? After a short time it changes first to indifference, then to disgust; and economical parents put away under lock and key for a later time, the things that are still tolerably well preserved. What can the child do with playthings on which already the fancy of an artist has worked and has left almost nothing for the self-activity of the child. The only thing it can do with these is to take them apart and destroy them. But the punishments inflicted on such occasions, show how many parents entirely misunderstand this expression of the instinct of activity so worthy of recognition, and the desire for knowledge and learning of the children. If one give to an indulged child the choice of his play-material, he will see that a stick of wood will be the dearest doll, mother's foot-stool the coach of state, a little heap of sand material for cooking, baking, building, writing, and drawing, and father's cane a darling pony. According to these experiences Froebel was anxious to make his gifts for play as simple as possible.

Gifts for Play.

First Gift for Play. The Balls—three balls of primary and three of secondary colors. With these the very little ones practice catching, swinging on a string, hopping, rolling, hide and seek, etc. With advancing age all known ball-plays come in succession.

Second Gift. Sphere, Cylinder, and Cube. The sphere, a solid ball, movable, but in every position the same. The cube stationary, but differing according to the position. The cylinder, rolling or standing, connecting the other two. All three in their connection leading over to the building plays.

Third Gift. The cube, divided into eight equal parts. It shows the whole and its parts, outside and inside, relations of size and number, arrangement, and direction.

The Fourth, Fifth, and Sixth Gifts form another step by perpendicular, horizontal, oblique divisions into different sizes. The variety of the different forms is infinitely great and is classified into—First, forms of knowledge, in which the laws of form, magnitude, and number are used; second, forms of beauty, by which the perception of what is pleasing to the eye is represented; third, forms of life, in which objects of real life, as furniture, implements, buildings, plants, and animals, are imitated.

The three following gifts, *Seventh, Eighth, and Ninth*, are, the flat or laying tablets, stick-laying, and ring-laying. These lead the child who has practiced representation with the building boxes, or through surface and linear forms, to drawing, which stands in relation with the interesting pricking and sewing. When the outlines of the form of life and beauty drawn on the paper are pricked through with the needle so that they show on both sides of the paper, then drawing in colored outline is again represented by sewing with colored threads. Weaving comes in here, which is first practiced with colored paper strips, and later with the most diverse materials, such as straw, bast, leather, ribbon, etc., and intertwining with thin, pliable wooden sticks.

As these occupations lead from the line to the surface, so the paper-folding, which follows, goes back to the solid imitating such things as a boat, hat, star, bird, etc. The hand is trained to skill, and the eye to careful observation, by the cutting by which the smallest piece of paper is changed into a means of entertainment and culture; and still more by the pease-work, in which the pointed ends of fine wooden sticks are stuck into soaked peas, and by this means the forms laid are fixed. When they create little architectural works, the objects represented appear in outline; they are transparent, also, and explain and illustrate perspective, figurative representation. Modeling in wax and clay ranks here as the last and highest step in which self-activity is given the fullest play, as well as the opportunity for the satisfaction of any existing artistic talent.

This close connection, at every step, with life, marks the standpoint from which Froebel wished to consider even the smallest thing in the life of a child. It is not the least excellence of the succession of clay moulding, pease-work, cutting, folding, weaving, building, pasting, pricking, sewing, and similar employments, which pertain to the first exercises in the comprehension of form and in training the eye, and form a necessary stepping-stone to geometry, geography, drawing, and writing, that they mingle in his plays and amusements, in whatever moves and animates childhood; and thereby satisfy the unity of the consciousness.

Movement Plays, and Songs.

The "play-gifts" mentioned form the part of the Kindergarten occupations which Froebel classed under the name of "mental plays." He shows quite a different phase of its workings in the "movement plays." They have, besides the common aim of plays, the object of satisfying the impulse of the child for the movement of its limbs, and also of advancing the bodily development. For a gain in this direction should not only always go hand-in-hand with mental improvement, but in the Kindergarten receives a prominent place.

The Kindergarten must offer fundamentally what most dwellings allow only occasionally from lack of room, and the grown-up inhabitants of them from desire of quiet; what the deplorable lack of free public places given up to the young; what the larger cities, with their foot-passengers, riders, and wagons, make almost impossible to children—an unchecked movement of their limbs, which is to them a necessity almost as pressing as drawing the breath. For, besides the closed room or hall, it must have, where possible, an open place planted with trees—a play-ground.

Here in the fresh air the little ones may live in cheerful activity and motion, and thus bloom merrily like the flowers of a garden. From the numberless dancing and singing plays which are handed down to the child's world from age to age by tradition, and of which every province and every city carefully cherishes special ones as its peculiar property, Froebel has collected the best, improved many of them by stripping off excrescences marring the original, and made them serve the educational aim of the Kindergarten. He has also added to them by his own invention. Through them all the pupils of the Kindergarten are first brought into living intercourse with each other, and share in the beneficent influence which living with his equals exerts on the child. Every movement play furthers the activity of all participants for a common end, which can only be reached when law and order rule. The Kindergarten guiding the play suffers no arbitrariness, no rude forwardness, no quarrelsome disputes, no domineering of the stronger and crowding of the weaker. Every one must do his part, according to his gifts and powers. The timid and those holding back must be encouraged, the forward ones instructed and reminded of their bounds, and all must have their rights. Living in such a well-ordered and conducted community exerts a good influence on the conduct of the children so very quickly that it shows itself in the family sometimes after a few weeks, in greater patience and ready willingness. The fear that a watchful guidance will disturb the happy little ones in their joy is quite unfounded. He misunderstands children who thinks that they prefer to play senselessly and aimlessly. On the contrary, when they are sure that a grown person will enter into their ways with kindness, they will invite such an one to show them an orderly play, or to decide how it must be properly played, or to bring the right order into that already begun.

The movement plays have another more vital center of union in the songs which accompany them. Every play has its song, which arises from it or is related to it, and which is sung sometimes by an individual, sometimes by the chorus. There is hardly anything which so claims the entire spiritual life of children and so irresistibly invites sympathy as singing. No sense lends its perceptions so directly to the heart as that of hearing. No activity is such a direct and almost involuntary expression of inner harmony as singing. Rightly then did Froebel and his friends devote to it an especially careful attention, and direct by it a prominent part in the plays. If, in spite of the many words and melodies given, one cannot repress the remark that neither the practical nor the musical side of the Kindergarten appear to be unfolded in the same degree as the educational, still he must think fairly, and not expect everything from one man. Many a roughness in Froebel's often extemporized verses, which often digress too strongly to the instructive and playful, has been polished already by a tender hand. In our folk-songs there yet lie concealed many grains of gold that should be unearthed and polished.

Intercourse with Nature.

A third and by no means subordinate direction of the activity of the Kindergarten is devoted to the intercourse of the children with nature.

It is doubly important where circumstances render this intercourse difficult, where they embitter to man the feeling of his kinship with nature, and at the same time spoil the life at many points by too much art. Children should not pass by unsympathetically the beauties which nature everywhere offers in rich abundance; their sense and perception of them must be awakened and trained. The care, under judicious guidance, of plants and animals, offers the best means for this. Whatever grows by the child's own care wins his deepest interest. The contemplation furnishes him solid knowledge and increases his sympathy to admiration and love. Therefore, a part of the play-ground should be reserved for a garden, in which every child has his own little bed which he cultivates himself. If in any way a place can be made for some domestic animals, were it only a canary bird, a little dove, a pair of hens, or some gold-fish in a globe, it will furnish a fuller satisfaction to this instinct. If the fields can be reached without danger of too great exertion on the part of the little ones, a walk should be taken at a proper time, which affords numberless opportunities, not only for the observation of nature, but for the entire unfolding of the spiritual life of the child. If such unsought occasions are used with tact they have often a greater influence than the methodical instruction imparted by the best system of teaching.

In the Kindergarten, after a quiet occupation and the general play, there should also be pauses to be devoted to unconstrained oral intercourse between the Kindergarten in charge and the children, and which are filled up most suitably by stories. A little story often does more than a long sermon. But it is difficult to tell a story well, and the art must be practiced. More difficult still is the choice of material which must be adapted to the children's point of view.

There are yet wanting good Guides, and Manuals, with model lessons and exercises;* but with the means of occupation and play already spoken of the Kindergarten is in a condition to take hold of the child's life, rousing, animating, and unfolding it in all directions. The few hours of the day which the children spend there will echo in their homes through the richness and vividness of their impressions. The never-resting instinct of activity in healthy children is no longer at loss for an object. The child does not trouble his mother so much; he is more skilful, happier; his bad angel, wearisomeness, is banished.

Improved Domestic Education.

In spite of all this the Kindergarten, according to Froebel's intention, has solved only half of its problem, and stands still before the other half, which consists in this, that it must be carried on by a bettering of the education in the family. This higher aim cannot be considered as reached when only an indirect influence is exerted on the family life through the pupils of the Kindergarten. No, quite the reverse. Froebel created the Kindergarten with the special intention of perfecting by practice in it, united with theoretical cultivation, the education of woman for her vocation, which, as experience teaches, cannot be consid-

*Our American Kindergartners, and Mothers, who wish to adopt the Froebel Material and Methods into the Nursery, have now an excellent Manual in "*The Kindergarten Guide*, by Maria Kraus-Boelte and John Kraus," published by E. Steiger, New York.

ered to have been generally accomplished by simple theory and books for mothers, excellent as these may be in themselves. This aim, however, must not be lost sight of, for important reasons. For since the mother's influence is the first, and therefore the strongest, it follows, of course, that it is of the highest importance that it should be the best. And since it is not so everywhere, should we not use every opportunity to bring it to this ideal? We have lower, middle, and higher girls' schools. Which of these has made a specialty of training young maidens for housewives and teachers of their own children? Not one! And they will have nothing to do with it. But this problem still exists. Surely the time will come for the young girls when they must take care of children, wait upon the sick, and look after kitchen and store-room. Is it to be supposed that they learn everything of themselves? The theory of educating little children, for which most young girls receive their only preparation in playing with dolls, must become a regular and essential part of female education, before the "experimenting and educating by hearsay" cease. Nowhere can this be learned better than in the closest connection with the Kindergarten.

Froebel developed this in the first detailed plan which he carried out in this direction. In such a seminary for Kindergartners and nurse-maids, with which also a Kindergarten must be connected, young maidens can, in a year, be so instructed and practically trained in the care of little children, that they learn to avoid grave errors and gain a foundation, from which an independent, wider culture is possible. And can not one in this way, better than in any other, come nearer a satisfactory solution of the vexed "Woman question?" Will not the administration of household affairs and the education of children continue to be the occupation most suited to woman's nature, and, at the same time, the noblest aim of all feminine activity? And will not the unmarried young women find in them reconciliation and contentment in richer measure than any 'emancipation' is able to furnish? There have been already women who were zealously active in this direction, and in the greater cities where the need is the most urgent, glorious results can be shown. It seems to be reserved for these associations of women, with the aid of all the strength active in this direction, to smooth the way for a more comprehensive organization. The seminaries for Kindergartners in Hamburg, Berlin, Dresden, Gotha, and other places, all of which are under the direction of private individuals and supported by voluntary contribution, to which the pupils add a small nominal sum for instruction, have for a number of years sent out a good number of well prepared and trained young women of all conditions, who are much in demand as domestic assistants, especially for educating children, and help to a more universal appreciation of a natural method of treating the little ones. It is for the interest of the teacher to advance this work in every way, because the Kindergarten, which does not seek to supply the family education (for this is by all means the best and generally desirable), but only wishes to aid the parents in the care of their children for the period when they do not devote themselves to their education and cannot be represented by teach-

ers, which should even teach all parents the proper discharge of their duties as educators, is a preparation for the elementary school.

Much could be said here of the mental helplessness of children who, sent to school in their sixth or seventh year, sometimes bring to the teacher an extraordinarily small number of impressions, scarcely any clear conceptions, and a very limited use of the mother tongue.

The experiences of Froebel in Switzerland are repeated in different degrees almost everywhere, and are not new to the teachers of the lowest elementary classes. But they express the wish to establish an organic connection between the Kindergartens and the school, and previously show at least, theoretically, their possibilities and usefulness.

The "General Union for family education and that of the people," has repeatedly offered a prize for an essay on this subject, without receiving a satisfactory solution of it according to their ideas. Recently, the prize was adjudged to a paper of Carl Richter, a teacher in Leipsic, the author of the "Pedagogical Library," and of another work '*On Object-Teaching in Elementary Schools*,' of which honorable mention is made.

The hope of a future organic connection between the Kindergarten and the school, as well as the wished-for introduction of Froebel's method into charitable institutions for little children, is not entirely unfounded. There are hardly any serious obstacles, since the Kindergarten in no way anticipates the real school instruction. And as the Gymnasium has recognized it as useful to have scholars properly prepared for its Sexta, by the passing through some elementary classes of the so-called Vorschule or preparatory school, so in the future perhaps it will be considered necessary to add a Kindergarten to every elementary school, which will grow in time to be an excellent bond between the school and home.

So the Kindergarten shows itself on every side as an institution in accordance with the spirit of the age for bettering the education, of which it is the natural foundation, and helping to restore it again in families. In spite of the obstacles arising at first from misunderstanding and from the feeble support of the public, in the course of a year it won for itself an honorable place among the institutions for the education of youth. This was owing to the sound strength of the fundamental idea from which it proceeded, to a need arising from circumstances, and to the continuous exertions of enthusiastic adherents, especially among women. Under their guidance the Kindergarten has quietly accomplished a great work, in giving to thousands of children happy hours whose stimulating influence is felt in the family.

Although it has not yet received the desired recognition, it may be, perhaps, that well-meant but mis-directed zeal has contributed as much to this as the cool reserve of those who scorned it under the form, so little like a school, into which Froebel poured his full heart to nourish the living germ. When it shall be developed more clearly and richly by the unwearied zeal of intelligent and judicious patrons, it will then remain an integral part of our children's education.

THE KINDERGARTEN SYSTEM.*

Fröbel first gave the name of Kindergarten about the year 1840 to his school of young children between three and seven years of age at Blankenburg, near Rudolstadt. Its purpose is thus briefly indicated by himself:—"To take the oversight of children before they are ready for school life; to exert an influence over their whole being in correspondence with its nature; to strengthen their bodily powers; to exercise their senses; to employ the awakening mind; to make them thoughtfully acquainted with the world of nature and of man; to guide their heart and soul in a right direction, and lead them to the Origin of all life and to union with Him." To secure those objects, the child must be placed under the influence of a properly trained governess for a portion of the day after reaching the age of three.

Fröbel differs from Pestalozzi, who thought that the mother, as the natural educator of the child, ought to retain the sole charge up to the sixth or seventh year. This necessarily narrows the child's experience to the family circle, and excludes in many cases the mutual action and reaction of children upon each other—under conditions most favorable to development. Mr. Payne embodies the genesis of Fröbel's system in his own mind as follows:

Let us imagine Fröbel taking his place amidst a number of children disporting themselves in the open air without any check upon their movements. After looking on the pleasant scene awhile, he breaks out into a soliloquy:

"What exuberant life! What immeasurable enjoyment! What unbounded activity! What an evolution of physical forces! What a harmony between the inner and the outer life! What happiness, health, and strength! Let me look a little closer. What are these children doing? The air rings musically with their shouts and joyous laughter. Some are running, jumping, or bounding along, with eyes like the eagle's bent upon its prey, after the ball which a dexterous hit of the bat sent flying among them; others are bending down towards the ring filled with marbles, and endeavoring to dislodge them from their position; others are running friendly races with their hoops; others again, with arms laid across each other's shoulders, are quietly walking and talking together upon some matter in which they evidently have a common interest. Their natural fun gushes out from eyes and lips. I hear what they say. It is simply expressed, amusing, generally intelligent, and often even witty. But there is a small group of children yonder. They seem eagerly intent on some subject. What is it? I see one of them has taken a fruit from his pocket. He is showing it to his fellows. They look at it and admire it. It is new to them. They wish to know more about it—to handle, smell, and taste it. The owner gives it into their hands; they feel and smell, but do not taste it. They give it back to the owner, his right to it being generally admitted. He bites it, the rest looking eagerly on to watch the result. His face shows that he likes the taste; his eyes grow brighter with satisfaction. The rest desire to make his experience their own. He sees their desire, breaks or cuts the fruit in pieces, which he distributes among them. He adds to his own pleasure by sharing in theirs. Suddenly a loud shout from some other part of the ground attracts the attention of the group, which scatters in all directions. Let me now consider. What does all this manifold movement—this exhibition of spontaneous energy—really mean? To me it seems to have a profound meaning.

"It means—

"1. That there is an immense external development and expansion of energy of various kinds—physical, intellectual, and moral. Limbs, senses, lungs, tongues, minds, hearts, are all at work—all coöperating to produce the general effect.

* Lecture delivered at the College of Preceptors at London, Feb. 25th, 1874, by Joseph Payne, Professor of the Science and Art of Education to the College.

"2. That activity—doing—is the common characteristic of this development of force.

"3. That spontaneity—absolute freedom from outward control—appears to be both impulse and law to the activity.

"4. That the harmonious combination and interaction of spontaneity and activity constitute the happiness which is apparent. The will to do prompts the doing; the doing reacts on the will.

"5. That the resulting happiness is independent of the absolute value of the exciting cause. A bit of stick, a stone, an apple, a marble, a hoop, a top, as soon as they become objects of interest, call out the activities of the whole being quite as effectually as if they were matters of the greatest intrinsic value. It is the action upon them—the doing something with them—that invests them with interest.

"6. That this spontaneous activity generates happiness because the result is gained by the children's own efforts, without external interference. What they do themselves and for themselves, involving their own personal experience, and therefore exactly measured by their own capabilities, interests them. What another, of trained powers, standing on a different platform of advancement, does for them, is comparatively uninteresting. If such a person, from whatever motive, interferes with their spontaneous activity, he arrests the movement of their forces, quenches their interest, at least for the moment; and they resent the interference.

"Such, then, appear to be the manifold meanings of the boundless spontaneous activity that I witness. But what name, after all, must I give to the totality of the phenomena exhibited before me? I must call them Play. Play, then, is spontaneous activity ending in the satisfaction of the natural desire of the child for pleasure—for happiness. *Play is the natural, the appropriate business and occupation of the child left to his own resources.* The child that does not play, is not a perfect child. He wants something—sense organ, limb, or generally what we imply by the term health—to make up our ideal of a child. The healthy child plays—plays continually—cannot but play.

"But has this instinct for play no deeper significance? Is it appointed by the Supreme Being merely to fill up time—merely to form an occasion for fruitless exercise?—merely to end in itself? No! I see now that it is the constituted means for the unfolding of all the child's powers. It is through play that he learns the use of his limbs, of all his bodily organs, and with this use gains health and strength. Through play he comes to know the external world, the physical qualities of the objects which surround him, their motions, action, and re-action upon each other, and the relation of these phenomena to himself; a knowledge which forms the basis of that which will be his permanent stock for life. Through play, involving associateship and combined action, he begins to recognize moral relations, to feel that he cannot live for himself alone, that he is a member of a community, whose rights he must acknowledge if his own are to be acknowledged. In and through play, moreover, he learns to contrive means for securing his ends; to invent, construct, discover, investigate, to bring by imagination the remote near, and, further, to translate the language of facts into the language of words, to learn the conventionalities of his mother tongue. Play, then, I see, is the means by which the entire being of the child develops and grows into power, and, therefore, does not end in itself.

"But an agency which effects results like these is an education agency; and Play, therefore, *resolves itself into education*; education which is independent of the formal teacher, which the child virtually gains for and by himself. This, then, is the outcome of all that I have observed. The child, through the spontaneous activity of all his natural forces, is really developing and strengthening them for future use; he is working out his own education.

"But what do I, who am constituted by the demands of society as the formal educator of these children, learn from the insight I have thus gained into their nature? I learn this—that I must educate them in conformity with that nature. I must continue, not supersede, the course already begun; my own course must be based upon it. I must recognize and adopt the principles involved in it, and frame my laws of action accordingly. Above all, I must not neutralize and deaden that spontaneity which is the mainspring of all the machinery; I must rather encourage it, while ever opening new fields for its exercise, and giving it

new directions. 'Play, spontaneous play, is the education of little children; but it is not the whole of their education. Their life is not to be made up of play. Can I not then even now gradually transform their play into work, but work which shall look like play?—work which shall originate in the same or similar impulses, and exercise the same energies as I see employed in their own amusements and occupations? Play, however, is a random, desultory education. It lays the essential basis; but it does not raise the superstructure. It requires to be organized for this purpose, but so organized that the superstructure shall be strictly related and conformed to the original lines of the foundation.

"I see that these children delight in movement;—they are always walking, or running, jumping, hopping, tossing their limbs about, and, moreover, they are pleased with rythmical movement. I can contrive motives and means for the same exercise of the limbs, which shall result in increased physical power, and consequently in health—shall train the children to a conscious and measured command of their bodily functions, and at the same time be accompanied by the attraction of rythmical sound through song or instrument.

"I see that they use their senses; but merely at the accidental solicitation of surrounding circumstances, and therefore imperfectly. I can contrive means for a definite education of the senses, which shall result in increased quickness of vision, hearing, touch, etc. I can train the purblind eye to take note of delicate shades of color, the dull ear to appreciate the minute differences of sound.

"I see that they observe; but their observations are for the most part transitory and indefinite, and often, therefore, comparatively unfruitful. I can contrive means for concentrating their attention by exciting curiosity and interest, and educate them in the art of observing. They will thus gain clear and definite perceptions, bright images in the place of blurred ones,—will learn to recognize the difference between complete and incomplete knowledge, and gradually advance from the stage of merely knowing to that of knowing that they know.

"I see that they invent and construct; but often awkwardly and aimlessly. I can avail myself of this instinct, and open to it a definite field of action. I shall prompt them to invention, and train them in the art of construction. The materials I shall use for this end, will be simple; but in combining them together for a purpose, they will enjoy not only their knowledge of form, but their imagination of the capabilities of form. In various ways I shall prompt them to invent, construct, contrive, imitate, and in doing so develop their nascent taste for symmetry and beauty.

"And so in respect to other domains of that child-action which we call play, I see that I can make these domains also my own. I can convert children's activities, energies, amusements, occupations, all that goes by the name of play, into instruments for my purpose, and, therefore, transform play into work. This work will be education in the true sense of the term. The conception of it as such I have gained from the children themselves. They have taught me how I am to teach them.

FRÖBEL'S THEORY IN PRACTICE.

I must endeavor to give some notion of the manner in which Fröbel reduced his theory to practice. In doing this, the instances I bring forward must be considered as typical. If you admit—and you can hardly do otherwise—the reasonableness of the theory, as founded on the nature of things, you can hardly doubt that there is some method of carrying it out. Now, a method of education involves many processes, all of which must represent more or less the principles which form the basis of the method. It is quite out of my power, for want of time, to describe the various processes which exhibit to us the little child pursuing his education by walking to rhythmic measure, by gymnastic exercises generally, learning songs by heart and singing them, practising his senses with a definite purpose, observing the properties of objects, counting, getting notions of color and form, drawing, building with cubical blocks, modeling in wax or clay, braiding strips of various colored paper after a pattern, pricking or cutting forms in paper, curving wire into different shapes, folding a sheet of paper and gaining

elementary notions of geometry, learning the resources of the mother-tongue by hearing and relating stories, fables, etc., dramatizing, guessing riddles, working in the garden, etc., etc. These are only some of the activities naturally exhibited by young children, and these the teacher of young children is to employ for his purpose. As, however, they are so numerous, I may well be excused for not even attempting to enter minutely into them. But there is one series of objects and exercises therewith connected, expressly devised by Fröbel to teach the art of observing, to which, as being typical, I will now direct your attention. He calls these objects, which are gradually and in orderly succession introduced to the child's notice, *Gifts*,—a pleasant name, which is, however, a mere accident of the system: they might equally well be called by any other name.

GIFTS FOR THE CULTURE OF OBSERVATION.

As introductory to the series, a ball made of wool, of say a scarlet color, is placed before the baby. It is rolled along before him on the table, thrown along the floor, tossed into the air, suspended from a string, and used as a pendulum, or spun around on its axis, or made to describe a circle in space, etc. It is then given into his hand; he attempts to grasp it, fails; tries again, succeeds; rolls it along the floor himself, tries to throw it, and, in short, exercises every power he has upon it, always pleased, never wearied in *doing* something or other with it. This is play, but it is play which resolves itself into education. He is gaining notions of color, form, motion, action and re-action, as well as of muscular sensibility. And all the while the teacher associates words with things and actions, and, by constantly employing words in their proper sense and in the immediate presence of facts, initiates the child in the use of his mother-tongue. Thus, in a thousand ways, the scarlet ball furnishes sensations and perceptions for the substratum of the mind, and suggests fitting language to express them; and even the baby appears before us as an observer, learning the properties of things by personal experience.

Then comes the *first Gift*. It consists of six soft woollen balls of six different colors, three primary and three secondary. One of these is recognized as like, the others as unlike, the ball first known. The laws of similarity and discrimination are called into action; sensation and perception grow clearer and stronger. I cannot particularize the numberless exercises that are to be got out of the various combinations of these six balls.

The *second Gift* consists of a sphere, cube, and cylinder, made of hard wood. What was a ball before, is now called a sphere. The different material gives rise to new experiences; a sensation, that of hardness, for instance, takes the place of softness; while varieties of form suggest resemblance and contrast. Similar experiences of likeness and unlikeness are suggested by the behavior of these different objects. The easy rolling of the sphere, the sliding of the cube, the rolling as well as sliding of the cylinder, illustrate this point. Then the examination of the cube, especially its surfaces, edges, and angles, which any child can observe for himself, suggest new sensations and their resulting perceptions. At the same time, notions of space, time, form, motion, relativity in general, take their place in the mind, as the unshaped blocks which, when fitly compacted together, will lay the firm foundation of the understanding. These elementary notions, as the very groundwork of mathematics, will be seen to have their use as time goes on.

The *third Gift* is a large cube, making a whole, which is divisible into eight

small ones. The form is recognized as that of the cube before seen; the size is different. But the new experiences consist in notions of relativity—of the whole in its relation to the parts, of the parts in their relation to the whole; and thus the child acquires the notion and the names, and both in immediate connection with the sensible objects, of halves, quarters, eighths, and of how many of the small divisions make one of the larger. But in connection with the third Gift a new faculty is called forth—imagination, and with it the instinct of construction is awakened. The cubes are mentally transformed into blocks; and with them building commences. The constructive faculty suggests imitation, but rests not in imitation. It invents, it creates. Those eight cubes, placed in a certain relation to each other, make a long seat, or a seat with a back, or a throne for the Queen; or again, a cross, a doorway, etc. Thus does even play exhibit the characteristics of art, and “conforms (to use Bacon’s words) the outward show of things to the desires of the mind”; and thus the child, as I said before, not merely imitates, but creates. And here, I may remark, that the mind of the child is far less interested in that which another mind has embodied in ready prepared forms, than in the forms which he conceives, and gives outward expression to, himself. He wants to employ his own mind, and his whole mind, upon the object, and does not thank you for attempting to deprive him of his rights.

The *fourth, fifth, and sixth Gifts* consist of the cube variously divided into solid parallelepipeds, or brick-shaped forms, and into smaller cubes and prisms. Observation is called on with increasing strictness, relativity appreciated, and the opportunity afforded for endless manifestations of constructiveness. And all the while impressions are forming in the mind, which, in due time, will bear geometrical fruits, and fruits, too, of æsthetic culture. The dawning sense of the beautiful, as well as of the true, is beginning to gain consistency and power.

I cannot further dwell on the numberless modes of manipulation of which these objects are capable, nor enter further into the groundwork of principles on which their efficiency depends.

OBJECTIONS TO THE SYSTEM CONSIDERED.

It is said, for instance, without proof, that we demand too much from little children, and, with the best intentions, take them out of their depth. This might be true, no doubt, if the system of means adopted had any other basis than the nature of the children; if we attempted theoretically, and without regard to that nature, to determine ourselves what they can and what they cannot do; but when we constitute spontaneity as the spring of action, and call on them to do that, and that only, which they can do, which they do of their own accord when they are educating themselves, it is clear that the objection falls to the ground. The child who teaches himself never can go out of his depth; the work he actually does is that which he has strength to do; the load he carries cannot but be fitted to the shoulders that bear it, for he has gradually accumulated its contents by his own repeated exertions. This increasing burden is, in short, the index and result of his increasing powers, and commensurate with them. The objector in this case, in order to gain even a plausible foothold for his objection, must first overthrow the radical principle, that the activities, amusements, and occupations of the child, left to himself, do indeed constitute his earliest education, and that it is an education which he virtually gives himself.

Another side of this objection, which is not unfrequently presented to us, derives its plausibility from the assumed incapacity of children. The objector points to this child or that, and denounces him as stupid and incapable. Can

the objector, however, take upon himself to declare that this or that child has not been made stupid even by the very means employed to teach him? The test, however, is a practical one: Can the child play? If he can play, in the sense which I have given to the word, he cannot be stupid. In his play he employs the very faculties which are required for his formal education. "But he is stupid at his books." If this is so, then the logical conclusion is, that the books have made him stupid, and you, the objector, who have misconceived his nature, and acted in direct contradiction to it, are yourself responsible for this.

"But he has no memory. He cannot learn what I tell him to learn." No memory! Cannot learn! Let us put that to the test. Ask him about the pleasant holiday a month ago, when he went nutting in the woods. Does he remember nothing about the fresh feel of the morning air, the joyous walk to the wood, the sunshine which streamed about his path, the agreeable companions with whom he chatted on the way, the incidents of the expedition, the climb up the trees, the bagging of the plunder? Are all these matters clean gone out of his mind? "Oh, no, he remembers things like these." Then he has a memory, and a remarkably good one. He remembers because he was interested; and if you wish him to remember your lessons, you must make them interesting. He will certainly learn what he takes an interest in.

I need not deal with other objections. They all resolve themselves into the category of ignorance of the nature of the child. When public opinion shall demand such knowledge from teachers as the essential condition of their taking in hand so delicate and even profound an art as that of training children, all these objections will cease to have any meaning.

My close acquaintance with Fröbel's theory, and especially with his root-idea, is comparatively recent. But when I had studied it as a theory, and witnessed something of its practice, I could not but see at once that I had been throughout an unconscious disciple, as it were, of the eminent teacher. The plan of my own course of lectures on the Science and Art of Education was, in fact, constructed in thought before I had at all grasped the Fröbelian idea; and was, in that sense, independent of it.

The Kindergarten is gradually making its way in England, without the achievement as yet of any eminent success; but in Switzerland, Holland, Italy, and the United States, as well as in Germany, it is rapidly advancing. Wherever the principles of education, as distinguished from its practice, are a matter of study and thought, there it prospers. Wherever, as in England for the most part, the practical alone is considered, and where teaching is thought to be "as easy as lying," any system of education founded on psychological laws must be tardy in its progress.

"The Kindergarten has not only to supply the proper materials and opportunities for the innate mental powers, which, like leaves and blossoms in the bud, press forward and impel the children to activity, with so much the more energy the better they are supplied. *It has also to preserve children from the harm of civilization, which furnishes poison as well as food, temptations as well as salvation; and children must be kept from this trial till their mental powers have grown equal to its dangers. Much of the success of the Kindergarten (invisible at the time) is negative, and consists in preventing harm. Its positive success, again, is so simple, that it cannot be expected to attract more notice than, for instance, does fresh air, pure water, or the merit of a physician who keeps a family in health.*"—*Karl Froebel.*

CRITICAL MOMENTS IN THE LIFE OF FROEBEL, BY BAROP.

"At the end of twenty years," said Barop, when we were talking of the early history of Keilhau, "we were in a very critical position. You know we had little outward means at our command when we began our enterprise. Later, Middendorff offered his paternal inheritance; but the acquisition of the land, and the erection of the necessary buildings, required considerable funds, so that Middendorff's contribution soon vanished like drops of water that fall on a hot stove. My father in law, Christian Ludwig Froebel, stepped in and gave what he could into the hands of his brother, without any conditions; but even his offerings could not hold at bay care and want. My father was a wealthy man, but he was so displeased at my joining the Froebelian circle and settling at Keilhau that he afforded me no support of any kind. Distrust surrounded us on all sides in those first years; both open and secret enmities from far and near tried to embitter our life and check our efforts in the germ. Not the less did the institution bloom out quickly and gloriously, but was brought later to the verge of ruin by the well directed persecutions against the Burschenschaften (an association of students for patriotic purposes); for the spirit of 1815 was incarnated in the institution, and just that spirit was exposed to the most extreme opposition. It would carry me too far if I were to describe this fully. It seemed to me at that time as if the enemy would really conquer. The number of our pupils (originally thirty) had diminished to five or six, and, consequently, the vanishing little revenue increased the burden of debts to a height that made us dizzy. From all sides the creditors rushed in, urged on by the attorneys, who washed their hands in our misery. Froebel vanished through the back door up the mountain when the duns appeared, and it was left to Middendorff to quiet most of them, in a degree which only he can believe possible who has been acquainted with Middendorff's influence over men. On the side of the workmen who had to ask for money, there were touching scenes of resignation, confidence, and magnanimity. A locksmith, for instance, was required by an attorney to 'bring a suit against the churls,' since nothing was to be got from them and their destruction. The locksmith, enraged, refused to assault our persons, and retorted that he had rather lose his hardly earned money than to doubt our honorable intentions, and that nothing was further from his purpose than to increase our troubles. Ah! and this trouble was hard to bear, for Middendorff was already married, and I was following his example. When I asked my wife for her hand, my father and mother in law asked: 'but you will not remain at Keilhau?' 'Yes,' I replied. 'The thought for which we are living appears to me important and suited to the times, and I do not doubt that men will be found who will trust us to carry out the idea correctly, as we trust the Invisible One.' In fact, in spite of all obstacles, we have never for a moment lost faith in our educational mission, and even the worst dilemma at that time saw no wavering band of men in this valley.

[I will insert here a note which I find in a Wichard Lange's edition of Middendorff's writings, for if more than justice is done to one man, it is probable that less than justice will be done to another, or to others.]

"In the last years of his life Froebel lived at Marienthal, apart from the family circle of Keilhau, and here founded his training-school. Here he had to bear the burden of the housekeeping and other inconveniences, and he determined to marry again, to give his pupils motherly care and sympathy. He married a trusted pupil, who had endeared herself to him, and who had accompanied him to Marienthal from the beginning. He stood at the marriage altar again, then in his seventieth year, for the second time, and sometime before he had said to me that it was in fact 'a living union.' The marriage excited bad blood in the beginning among the members of the family, and made a quarrel, which had already arisen, much worse. This difference between him and those (Middendorff excepted) who had worked with him in earlier times, indeed, at his call, had willingly shown themselves capable of the greatest self-sacrifice and devotion, was easily explained. Once for all, Froebel's brother, Christian Lewis, Middendorff, and Barop, had one attribute of character which was wanting in Froebel,—a stern consciousness in the fulfillment of past obligations. But Froebel turned away from all the obstacles and difficulties that obstructed his activity with an ingenious facility, was often highly unpractical and thoughtless, and did not allow himself to be essentially disturbed by the pressure upon his creditors. If this had not been compensated by the opposite quality in his fellow-workers, both men and women, he must, in my opinion, have been wrecked very early upon the hard, inflexible rock of reality. But the others held on to him, and desired for the progressing old man that there should be a limit set to the eternal, restless life and striving at various points in Germany and Switzerland, which was not unlike one kind of vagabondage, and something whole and perfected in itself should be done at one point. The care for his own increasing troop of children called for foresight and economy. As he had contempt for every other kind of opposition, so he also had for those which grew up in his family; indeed, in the resentment which opposing difficulties always excited in him, he was fabulously unjust to the persons from whom they sprung. His expressions against his own brother, who was simple human greatness personified, a living magnanimity, and against my mother-in-law, who had stood by him from early youth, were often of so revolting a kind that I could not refrain from opposing him in the most decided manner. Middendorff suffered infinitely on these occasions. He could not blame the actions of his own family, but he tried as faithfully to turn aside the slightest aspersion against the man whose personality, life, and action, fettered him with magic power. They both rest under grassy mounds; the inseparable ones,—Froebel and Middendorff. Diesterweg apostrophized the latter,—*pia anima, anima candida*; never-to-be-forgotten friend! Great men have great weaknesses; the shady side, belonging to their finite nature, dies with them; but what they have thought, lived, and striven for remains for posterity. Froebel himself often acknowledged with deep

regret that he knew himself to be full of faults and weaknesses. Indeed, he even thought the eternal Spirit had selected so miserable an instrument for the bearer of his idea in order that it might be clearly seen that it is the idea and not the man by which what is lasting and blessed for humanity is offered.

"The institution at Marienthal made its beautiful and sacred progress, and the second wife of Froebel fulfilled her task excellently. Every one who has seen Marienthal, and realized the impulse given there, will have wondered at her judicious and fervent and inspiring life among her pupils, as well as at that attractive power which the Froebelian cause may exert upon the unspoiled womanly feelings. The direct personal influence of Froebel was astonishingly great. He knew how to penetrate to the deepest depths of the souls of his hearers; he could transform and make them young again, root out the taste for external things, and thoroughly banish trifling from the life, and in their place set a deeply-moral, earnest, and enthusiastic striving. When I saw him speaking and working among his pupils the following thought possessed me: One may think this or that upon the activity and efficiency of Froebel, ascribe to this or that correctness, discover in it greater or less influence,—one thing stands fast; he is the apostle of women, the reformer of home education."

"When our trouble was greatest, new prospects opened upon us. At the instigation of several influential friends who stood by us, the attention of the Duke of Meiningen was fixed upon us. He became acquainted with Froebel, and asked him about his plans. Froebel laid before him the plan of an educational institution worked out and agreed upon by us in common, in which should be taught not only the usual things, but manual labor, Joiner's work, basket work, book-binding, tillage, etc., etc., should be used as means of culture. During half the school-time there was to be study, and during the other half, with the limbs. This work was to give direct material for instruction, and, above all things, excite in the mind of the child the desire for learning and explanation, so as to stimulate and strengthen the mind for invention and practical work. The awakening of this desire, this impulse to learn and to create, was one of the fundamental thoughts of Frederick Froebel. Illustration, in the Pestalozzian sense, was not far-reaching and deep-reaching enough, and he endeavored to look upon man radically as a creative, not merely receptive, but chiefly as a productive being. We had not been able to realize the thought at Keilhau, because the means for working out technical instruction were specially wanting to the pupils. But with the help of the Duke of Meiningen the boldest of our hopes seemed likely to be satisfied. The preparation of the above-mentioned plan led to many technical constructions which already contained the elements of the Kindergarten plays. They are mostly lost and destroyed, but the plan has remained. I will look it up for the use and advantage of the cause, when wanted. The Duke of Meiningen was very well satisfied with Froebel's explanations, and particularly with the straightforward and open hearted way in which they were given. There was an agreement by which Froebel was promised for educational purposes the estate at Helba, with thirty acres of land, and an annual grant of 1,000 gulden. It may be incidentally

mentioned that the duke consulted Froebel about the education of his heir. Froebel told him frankly that nothing would come out of the future ruler if he was not educated in companionship with others. The duke followed his advice. The prince was taught and disciplined in common with other boys.

"When Froebel returned from Meiningen, the whole circle was highly pleased, but the joy was not to last long. A prominent man in the Meiningen region, the autocrat, as it were, in educational matters, because he was on that subject the right hand of the prince,—a man who also had his merits in literary respects, and who had not been taken into consultation, was afraid of losing his commanding influence by the springing up of Froebel. We were suddenly again beset with the most degrading and hateful public and secret accusations, to which our precarious position in Keilhau offered welcome, and, alas! more than sufficient plausibility. The duke had secretly a flea put into his ear. He began to waver; turned suddenly upon Froebel, and demanded a proviso of about twenty pupils for an indefinite time. Froebel saw the design of this, and was put out of tune; for where he scented mistrust he immediately gave up all hope, and he dashed out of his mind what had a few hours before filled him with enthusiasm. He broke off all negotiations, and started off to Frankfort-on-the-Main in order to impart to his friends of former times there the results of his action, for he had become perplexed by the many obstacles. Here he luckily met the well-known musical composer, Schnyder von Wartensee. He told this man of his recent experiences and his plans, and exercised over that artist those electrifying and inspiring influences peculiar to his creative nature. Schnyder knew how to estimate his efforts, and offered him his castle of Wartensee, in Switzerland, for an educational institution. Froebel eagerly and joyfully grasped the hand which was offered him, and set out for Wartensee with his nephew Ferdinand, my brother in law.

"There Frederick and Ferdinand Froebel resided and worked a long time, when I (B.) was asked by my fellow members of the educational circle to inform myself precisely of the situation of things in Switzerland. With ten dollars in my pocket, and an old summer coat, which I wore, and a threadbare dress-coat, which I carried with me, I trudged off on foot. Should I tell you how I fought my way, I should probably excite in you a suspicion of stark exaggeration. Enough: I arrived, inquired in the surrounding regions about my friends and their activity, and heard that nothing further had been charged to the 'heretics' than that they were 'heretics.' Some peasant children of the neighboring regions had been found; but they did not meet the strangers whom they had judged in the beginning by their outward condition. The agitation of the clergy, which began as soon as the institution could be called such, and which became the greater the more our friends stood firmly on their feet, had its effect, and prevented a quick growth of our enterprise. Besides, the ground for our enterprise was not found at Wartensee. Schnyder had, with a generosity which cannot be too much praised, not only placed his castle at our disposal, but even the inventory of its contents,—his silver plate, his glorious library, in short, everything that was in and about the castle;

but he would permit no building of any kind to be erected, and, as the room was in no way sufficient for us, we could only make a temporary and passing use of his support.

"We saw the precariousness of our position in its whole sharpness, but knew of no escape from it.

"In a wonderful way new prospects opened before us at a moment when we least expected it. We were sitting in a hotel near Wartensee, and conversing with the strangers who were there about our efforts. Three travelers were quite transfixed by our representations. They said they were merchants known at Willisau, and declared expressly that they were disposed to work for us and our efforts in Willisau, and to make a settlement there themselves, and carry out our plans to a greater extent. The company had traded in the cantonal government, and had for that reason moved, provisionally, into a castle-like building. About forty pupils out of the canton immediately entered, and we seemed at least to have found what we were seeking. But the enraged pastors rose now with truly devilish power against us. Our lives were not safe, and we were warned several times by compassionate souls, if we thought of taking a solitary walk, or struck out into a road over the mountain. To what fearful measures the bigotry extended, the following occurrence shows:

"In Willisau, every year, a church festival takes place, in which a host spotted with blood is shown. The drops of blood, according to the popular belief, were drawn out by two gamblers, who, cursing Jesus, drew their swords upon him, and who, in consequence of this crime, were caught by the devil. When the 'God be with us' seized the miscreant by the throat, a few drops oozed from Jesus's wounds. Now, in order that other drops should not fall in a similar manner from the miscreant, a thanksgiving festival is celebrated every year, and the host shown, for a warning, to the worshipping people, who stream in in troops from the whole country to join the procession. We were obliged to attend the festival, and, in order to have something to do, we had undertaken the musical direction of it. I anticipated a storm, and had urged my friends to keep quiet under all circumstances, and to show no trace of embarrassment. The singing was finished, and, in place of the expected clergyman, there appeared suddenly a boisterous, fanatical Capuchin monk. He entered into complaint of the godlessness and wickedness of the present generation, painted in glowing colors the stripes of hell which would hit the cursed race, then turned to the terrified Willisauers and explained pointedly as one of the evil deeds of that people, that, by calling in the heretics, meaning us, of course, they had brought ruin into their midst. More and more violent were his words, more and more ghastly his curses upon us and our abettors, more and more terrific his descriptions of the stripes of hell prepared for the Willisauers for their abhorrent deed. Froebel stood benumbed, without moving a limb or withdrawing his gaze from the Capuchin just opposite to him, standing in the midst of the people; and the rest of us looked on motionless. The parents, our pupils, and many others, had already fled in the midst of this Jeremiad. We expected the worst for ourselves, and had already taken precautions for our protection, and measures to overcome the brawler. But we stood

quietly in our places and heard the closing words of the Capuchin: 'Then, if you would earn eternal treasures in heaven, make an end to the grievance, and suffer the wretches no longer in your midst. Hunt the wolves out of the country, to the honor of God and the confusion of the devil! Then peace and blessing will return, and great joy will be with God in heaven and with those who serve Him and His holy One from their hearts! Amen!' Scarcely had he spoken the last word when he vanished through a side door, and was not seen again. But we passed quietly through the gaping and threatening crowd. No hand was raised at the moment; but mischief lowered upon us from all sides, and it was not pleasant to see the sword of Damocles already suspended over our heads. With this painful feeling of insecurity they sent me to the government of the canton, and especially to the Abbé Girard, and the justice of the peace, Edward Pfyffer, with a petition that he would protect our safety to the best of his power. On the way I was known at a tavern as one of the lately-oppressed band of heretics, by a clergyman. They whispered about me, and cast threatening and contemptuous glances at me from all sides. At last the priest became more and more audacious, and accused me aloud of being an abominable heretic. I arose slowly, advanced with a firm step toward the black-coat, and asked him: 'Do you know who Jesus Christ was, sir?' and, 'Do you hold anything from Him?' 'Surely; He is God—the Son, and we must honor Him and believe in Him, if we do not wish to be eternally damned!' I continued,—'You can, perhaps, tell me whether Christ was a Catholic or a Protestant?' The priest was silent; the crowd gaped and soon applauded me. The priest left, and they let me alone. The question had effected more than a whole speech would have done. In Edward Pfyffer I learned to know a man of humane and firm character, of sterling worth, and worthy of all respect. He goes upon the principle that it is not of much use to take this or that superstition from the people, but that one must work against sluggishness of thought and want of independence from the foundation through an intelligent education. For that reason he esteemed our undertaking highly. When I gave him an outline of our griefs, and the danger we incurred in our lives, he replied: 'There is only one way to make yourselves secure,—you must win the hearts of the people. Work on for a long time, and then invite all the people from far and near to a public examination. If you pass through that trial and win the multitude, then, and only then, will you be secure.' I went back, and we followed his counsel. A great crowd of people from the various cantons streamed in to the examination, and delegates from Zurich, Berne, etc. Our battle with the clergy, particularly, was an occurrence that was spoken of in most of the Swiss papers, and the general attention had been directed to it. We conquered perfectly at the examination. The boys developed a happy state of mind and a warmth of zeal; indeed, they answered in such an unembarrassed and inoffensive manner that all present were delightedly surprised and gave us loud applauses. The examination lasted from seven o'clock in the morning till seven in the evening, and closed with social plays and gymnastic exercises. We rejoiced inwardly, for our cause was now to be considered established. The thing came to

public action, to public notice, and the most brilliant speeches were made in our favor by Pfyffer, Amryn, and others. The assembly made a decree that the castle-like educational building should be given to us at a reasonable price, and that the Capuchins, who had publicly made such an uproar against us, should be showed out of the canton."

"Some time after the above-mentioned examination appeared a deputation from the canton of Berne, and invited Froebel to undertake the erection of an orphan-house in Burgdorf. Froebel proposed that the instruction in the newly-founded orphan-house should not be restricted to the orphan children, gained his object, and followed the summons.

"Now I looked upon my mission as providentially closed, and I desired to go back to Keilhau, for my eldest son was already a year old, and I had never yet seen him. Middendorff, therefore, left his family and took my place; he lived four years in Willisau away from his wife and child. In Keilhau things had, in the meantime, worked more favorably, and the attendance had increased in a joyful manner. I resolved now to raise the mother institution out of its economical swamp. I set in motion an express, even if a permitted swindle, borrowed a sum here to discharge a creditor there, and covered up one debt by another. In this manner I restored the lost credit, and, as the revenues increased to our delight, I soon acquired land, and from that time have been able to support the undertaking of the others more and more, and create for the whole circle a gratifying and increasing sense of stability, and a refuge from all chances.

"In Switzerland the cause did not develop according to our wishes, in spite of the decree of the legislative assembly. The institution in Willisau enjoyed unlimited confidence, but the opposing agitation of the priesthood bloomed in secret afterwards as well as before, and drew much animadversion upon the institution from a distance. For this reason we could not reach what, under other circumstances, with the activity and capacity of self-sacrifice of our circle, might certainly have been possible.

"Ferdinand Froebel and Middendorff remained in Willisau; Froebel went to Burgdorf with his wife, and, a little after, was appointed director of the orphan-house by the government. In that capacity he had to conduct a so-called repetition-course for teachers. In that canton was the following excellent arrangement: every two years the teachers had a furlough of a quarter of a year. During this time they assembled in Burgdorf and exchanged their experiences and worked at their further cultivation. Froebel had to conduct the proceedings and associated studies. His own personal experience, and the communications of the teachers, led him anew to the conviction that school education is wanting in the correct and indispensable foundation, until the reformation of home education shall be kept in view and made preliminary. The necessity of building up wise mothers came into the foreground in his soul, and the importance of the earliest education seemed to him more significant than ever. He determined to employ his educational thoughts, whose intelligent working out a thousand obstacles had prevented, at least to the guidance of the earliest childhood upon all sides, and to enlist the woman-world for this idea and its efficient working. He would supplement the 'Book for Mothers' (Pestalozzi's) by a theoretico-practical guide for

women. Something occurred from without which urged him forward. His wife became very dangerously ill, and the physicians required a total change from the rough mountain air of Switzerland. Then he determined to give up his situation and go to Berlin. The institution at Willisau, which flourished outwardly, but was more and more hampered in its organic development by the bigotry of the priests, was obliged to be given up, for the government went into the hands of the Jesuits. Langethal and Ferdinand Froebel were appointed teachers of the institution in Burgdorf. Later, Langethal separated himself from the whole, and undertook the direction of a girls' school in Berne which the well-known Fröblich now conducts; in so doing took a step which Froebel never pardoned. Ferdinand Froebel remained director of the orphan-house in Burgdorf until his sudden and unexpected death. The general mourning, which had never known its equal in Burgdorf, showed what his efforts had been and how well they had been understood there.

"When Frederick Froebel went back from Berlin, the idea of an institution for little children was already fully formed in him. I rented him a locality in the neighboring Blankenburg. For a long time he could not find a name for his cause. Middendorff and I walked over the mountain with him to Blankenburg. He exclaimed, repeatedly, 'If I could only find a name for my youngest child!' Suddenly he stood still, as if transfixed, and his eye took an almost transfigured expression. Then he called out to the mountain, and called again to all the four winds: 'Εὐρηκα! Eureka! KINDERGARTEN the institution shall be named!'"

So far Barop. He is the only one who now [1861] enjoys the blossoming out of the mother institution. He has become wealthy,* and has enjoyed many honors. The University of Jena bestowed upon him a doctor's diploma at its jubilee, and the Prince of Rudolstadt appointed him Councilor of Education. Froebel sleeps in Liebenstein, and Middendorff at the foot of Kirschberg in Keilhau. They sowed and did not reap; it may be, then, that the enjoyment which lies in sowing exceeds that of reaping. Certainly it was glorious that Froebel, shortly before his death, was highly honored by the Teachers' Convention in Gotha. When he appeared, the whole assembly rose like one man; and Middendorff also, shortly before his death, had the joy of hearing the same assembly at Salzungen declare the Froebel cause to be one of universal importance, and a subject for their special attention and continued experiment.

* By inheritance.

The Year 1825.

KEILHAU.—OFFICIAL TESTIMONY OF SUCCESS.*

In the article called "Critical moments in the life of Frederick Froebel," I mentioned that the "Universal German Educational Institution" nearly came to its complete ruin, in its twentieth year. In another article, entitled "Unity of life," I have given some internal causes by which the institution, which had once been flourishing, came to the verge of ruin. But there were other causes, which perhaps in and by themselves would not have been able to bring about such disastrous effects. First, the cross-fire of the enemy in the camp and outside of it had that melancholy effect. Every one well informed in history knows the demagogery of a certain Herr von Kampz, the persecutions of the Bürgenschaften, which culminated in the death of Kotzebue, in the midst of that twenty years. Johannes Arnold Barop was especially the subject of these persecutions, and as he was already in Keilhau, even if not considered a fellow-worker there, when his papers were taken into custody, yet his presence there might pass as an excuse for the suspicion entertained of Keilhau. Keilhau was represented openly and in secret as the brooding nest of demagogism, and they stormed from Prussia, and on the day appointed for the meeting of the confederates of the Schwarzburg Rudolstadt government, they demanded the breaking up of the institution. The government sent the then Superintendent Zeh as a committee of inquiry to Keilhau, and met the oppressors with the subsequent report. The government left the institution unshorn, and only made the famous requisition that the pupils of the institution should cut their hair short. But the persecutions none the less had their intended effect. A part of the terrified parents, particularly the nobles, took their children away, and the institution was crippled on all sides by the crafty and barefaced agitation of its enemies. In 1829 the number of pupils diminished, as has already been mentioned, from sixty to five. Similar machinations against Keilhau took place at a later time, when the general reaction followed the flare-up of 1848. At that time there was as little occasion for enmity towards Keilhau as in any part of the twenty years.

It scarcely needs to be affirmed in this place that there was not the most distant trace of political agitation there. They were only trying to cultivate men in the way which is pointed out quite correctly in the following report. The old fighters for freedom, Froebel, Middendorff, and Langehal, who had learned to esteem each other more and more as Lützow's followers in the war, naturally hung with great love upon our nation, and were trying to cultivate German children. That their efforts were directed to building up men in the children, and Germans in the men, constituted their whole crime, but still more, that the spirit of 1813-15 had found a sort of refuge in Keilhau.

The devoted teachers were as far from using their efforts at education

* A Public Voice in 1825 upon the efforts of Frederick Froebel, from W. Lange, Vol. I, p. 24.

for political purposes as Sirius is from the earth. But from the year 1819, which the *Agis* (a newspaper), justly called the "mad year," begins a period of German degradation and shame to which the "Universal German Educational Institution" almost fell a sacrifice. The expressions of Froebel are interesting which he addressed to Barop in March, 1828, at that time. They show that he neither lost courage nor his spirits, and that his chief fellow-workers wavered not a moment. "The outer life stands quite at the same point of its development, and at this time surrounded by a dark night, pregnant with storms, out of whose black clouds every moment annihilating lightning threatens to flash. But God has thus far held his protecting shield over us with His almighty arm, and so we have lived like the little chickens in the thunder storm, under the protecting wing of their mother; we have reposed like the child in the tempest in the lap of the living, careful, true mother." And at the close he says: "What you tell me of the Berlin opinion of Keilhau I well know, but I have nothing to say about it. Act firmly on your convictions; you can do it, for more and more everything unites and reveals itself to me, and what I believed earlier, indeed was convinced of, and was founded only partially on my own intuitions, I see now in all creation, in the being of things, in nature, and in the ordering of the world, and the progressive culture of humanity; *God in creation, in the order of nature and the world, in the progressive culture of humanity, in the source of human education*;—this is the fundamental thought of my spiritual inward and outward educational life. On this foundation, you as well as I can, with more than Lutheran firmness, affirm the rights of nature in education, and so come forward as fighters for our educational progress." And as one fellow worker, Herr Carl (who afterwards, to the great distress of his associates, was drowned in the Saale) was once wavering, he expressed himself sadly in a letter to Barop, dated the 18th of February, 1829: "Man is but a weak being; he must always rest upon something out of himself, and can so rarely depend upon himself; and if he needs to be tried, punished, and strengthened to carry out a great thought, he sees the means of trial, purification, and strengthening are destined to be the destruction of his personality and of himself, and then comes back to the original feeling; life is dearer to him than the thought; he cannot sacrifice his own little life, his own little personality to it; or rather, the show of existence is dearer to him than really, livingly to exist."

So Froebel laid out new plans, excited by the offers of the Duke of Meiningen, and expresses himself thus in his last letter: "During the short time I have been in writing these lines, the thought of my and your educational effort has unfolded essentially, while in reference to carrying out and representing it, it has receded more and more and grounded itself more and more deeply. For a long time the education and handling of little children from the third to the seventh year of age has occupied my thoughts. A unity in a moment of consecutive thought, together with circumstances and other influences has now brought me to the conclusion to erect in Hefla, together with the People's Educational Institution, an institution for the care and development of children of both sexes from three to seven years of age, either orphans or motherless, and

of the middle class. I do not call this institution by the name which is now given to similar institutions, (that is, *little infant children's schools*) because it is not to be a *school*, for the children in it will not be *school'd*, but freely developed, because so far as it is possible for men who are themselves no angels, the God like in man must be truly *guarded* and *fostered*. I would have orphans, or at least motherless children, because the injurious influence of half-cultured parents and of generally uncultivated mothers is thus done away with by the very condition of things. I take children of both sexes, because children of that age have no sex, and because the reciprocal influence at that age beautifully develops mind and heart. I choose children of the middle class that we may be able to carry out the work we shall undertake."

OFFICIAL REPORT ON THE FROEBEL EDUCATIONAL INSTITUTION.

To the Princely Consistorium at Schwarzburg-Rudolstadt, 1825.

In conformity with instructions received on the 9th of September of last year (1824) from the princely Consistorium, to visit the Froebel institution in Keilhau and report on the same, I visited Keilhau for this purpose on the 23d of November of last year, and remained there from half-past eight in the morning till five o'clock in the evening. But to get a deeper insight into its true life and spirit, and ascertain wherein the peculiarity of this institution consists, as on a first visit only the fundamental instruction in its very various modifications could be laid before me, I passed a second day there on the 1st of March of this year, in order to look at the higher classical instruction, the methods of the teachers, and the attainments and development of the pupils.

The principal teachers at that time, and also at present, were Froebel, Langethal, and Middendorff, which three are considered the founders of the institution. Froebel has undertaken the oversight of the whole from the beginning, and with invincible courage has carried it on happily to the present day with incessant struggles, heavy cares, and the extremest needs.

Two years ago were added to the founders (in order, as it seems, not to separate so soon again) Herzog, a Swiss, and Schönbein, a Wurtemberger, as upper teachers, the last-mentioned one for the department of the natural sciences, the first-mentioned for history and German literature. An elocutionist, Herr Monnet, and Hanen Schmidt, and Brömel, workers in the present princely chapel, preside a few days every week at the institution, and teach respectively French and instrumental music.

The pupils numbered fifty at the time of my last visit, from among whom George Luther has gone to the University to study theology.

Both days that I passed at the institution, and so intimately with it, were agreeable to me in every respect, highly interesting and instructive, and have heightened and confirmed my esteem for the whole and for the founder, who in the midst of the storms of want and care, has carried it on and sustained it with the warmest and most unselfish zeal. It was very delightful to be breathed upon by the fresh, vital, free, and yet self-contained spirit which hovers over this institution in and out of the hours of study. What life never and nowhere represents in its actual phase, one finds here—a family of at least sixty pupils living in heartfelt quite mu-

tual understanding, all of whom do willingly what they have to do, each in their different places—a family in which because the strong bond of confidence unites them and every member strives for the whole, everything prospers of itself in an atmosphere of enjoyment and love. With great esteem and hearty affection all greet their director, and while the five-years-old little ones climb upon his knee, his friends and associates hear and honor his counselling words with the confidence that his insight, experience, and unwearying zeal for the good of the whole deserve; while he has bound himself with brotherly love and friendship to his fellow workers as to the supports and bearers of his truly holy life work. That this close union, we may say this brotherhood of teachers, has the most beneficial influence upon the instructions given, and upon the pupils themselves in every respect, is self-evident. The care and esteem with which the latter embrace all their teachers is expressed by an attention and obedience which makes all discipline of rules unnecessary. In the two days I was there, in and out of the buildings, in the merriment out of school hours as during the time of instruction, I did not hear a corrective word from the mouths of the teachers. In the heartfelt gayety with which as soon as they emerge from school hours into the fresh air, all spring and frolic together, I saw no real ill breeding, no rough, unmannerly, still less immoral conduct. The pupils live on an equality among themselves, without reference to condition, or birth, or dress, nor even the name by which they are called, because each one bears only his baptismal name, or some characteristic nickname given him. Great and little ones mix cheerfully and happily as if each obeyed but one law, as brothers in their father's home, and while all seem free to use their powers and form their plays, they are under the continual superintendence of the teachers, of whom now this one, now that one, overlooks their games and exercises, some of them almost always mixing with them, and joining sympathetically, all on an equality before the law of the play.

But how joyously united! with what delight this scene is to be contemplated, each one in free, vigorous process of formation in a child world not be ruled by the sway of the whip, a world in which every one secures his place by outward or inward power; how its effect is at the same time to educate and cultivate the circle of teachers! No slumbering faculty remains unawakened, each finds the stimulus it needs in so large and closely united a family, and also the place, small though it may be, where it can express itself; every feeling of curiosity shows itself freely, and meets an equal or similar feeling which may express itself openly, and in which the germinating faculty stands forth distinctly; on this account an impropriety can never make headway, for every individual who goes to excess is punished forthwith; he is asked to step out of the circle or to sit down; if he wishes to come into it again he must yield and learn to be humble and to improve. Thus the boys rule, reprove, furnish, educate, and cultivate each other without knowing it by the many-sided stimulus, as well as the opposing restraints. If on this side one cannot contemplate the movement and life of this institution otherwise than with pleasure, so the agreeable impression which a glance over the whole makes upon the visitor is increased by the visible order of the house, whose law alone can keep so large a whole

together, by the punctuality which savors of nothing like pedantry, and by a cleanliness which is rare to be seen to such a degree in an educational institution.

To this vigorous and freely moving, and yet well-ordered outward life, corresponds perfectly the inner life of mind and heart, which is here awakened and fostered. It would involve too much detail and it is therefore impossible to represent the instruction according to its subject or its form in each single department. In order to give an idea of its compass, I give the substance of the last study plan sent to me from the institution.

The instruction begins in the fifth year of the child's life, by teaching it to get the command of its senses by observation of external things, and then to distinguish these from each other, and at the same time to designate them by the right words, and to learn also to rejoice in this first knowledge, which is the first little item for the future spiritual treasure. Independence of mind is the first law of this instruction, therefore the manner of instruction pursued here does not make the young mind a strong box into which as early as possible, all kinds of coins of the most different values and coinage, as they are estimated in the world, are stuffed; but slowly, constantly, gradually, and always inwardly, that is, according to connection in nature, founded on the nature of the human mind, the instruction goes on earnestly, without the tricks and trying of the old philanthropists who let the letters be baked in sugar, but going from the simple to the complex, from the concrete to the abstract, so well adapted to the child and its needs, that it goes as happily to its learning as to its play; indeed, I was a witness of the little ones, whose study hours were pushed ahead somewhat for my convenience, crying for the superintendent, and wanting to know whether they must play all day and not learn, or whether the great boys alone were to have a session.

In the upper grade of the classical instruction stands those who were to take "Selecta" according to the usual arrangement in gymnasiums. In the winter previous they read Horace, Plato, Phædrus, and Demosthenes, and translated Cornelius Nepos into Greek. If on the day of my first visit, on which I had learned the plan of the fundamental instruction nearer, I had not been able to suppress the wish that the instruction might be such as this in all the lower schools, so now in the classical instruction which was first begun in 1820, in its whole compass, I could not but be astonished at the progress which had been made in that short time, and its profound accuracy (and afterwards, so far as the time permitted, all had gone on from the minimum of elementary instruction to the maximum of classical instruction); I felt as perfectly satisfied with regard to the instruction, as I had been with regard to the education. I had met with nothing else before than what every impartial examiner has experienced. From all the strangers whose judgment I have taken after they had become acquainted with the institution at Keilhau, I have not found one who was not satisfied, but many whom I consider highly intellectual, who have come away enthusiastic, and with full recognition and acknowledgment of the highest aim which the institution had set for itself, and the perfectly natural way which it has struck out to reach that aim as surely and completely as possible. This aim is by no means knowledge and science, but free, inde-

pendent culture of mind from within, whereby nothing is fastened upon the pupil from without, of which he has not formed a clear conception, and which, therefore, like tinsel, in no way elevates his intensive powers, and by which the scholar is never made happy because only the consciousness of his growing power gives him true joy. Inspired by what is noble, which the man who is developed on all sides considers the essence of reason and feeling, and by the elevation of his purpose, the superintendent of the institution has made it his goal to develop in each pupil the whole man, whose inner being reposes between the two poles of true enlightenment and genuine religion, in such a way that he may unfold himself and realize by clearer consciousness of the power bestowed upon him, what he can be according to its measure. Science is held in no worth at Keilhau, except as it becomes a more universal means of awakening the mind, of strengthening the individual, and guiding him to his highest destiny; and it is only fostered there specially because in the limited time, and according to the nature of the human mind, there is no more certain means of culture. But that all knowledge truly serves and is made useful to the pupils of the institution for so high an aim, one soon observes in the various stages of their acquisition. What they know is not a dead mass, but has form and life, and is converted into life as soon as possible. Each one is, so to speak, at home within himself, and neither the small nor the large pupils have any conception of a thoughtless parrot-like imitation, or of any knowledge that is not clear to their understandings. What they speak of they have observed intuitively, and it comes from them like an inner necessity and with decision and discrimination, and which do not waver by the objections of the teachers until they have themselves been persuaded that they are in error.

Every thing must be thought out; therefore they cannot think of anything that they do not improve upon it; even the dead grammar with its mass of rules becomes living before them, for they are incited to take hold of every language according to the history, manners, and character of the people who speak it. Thus looked upon, the institution is really an intellectual gymnasium, for every individual study that is pursued is a true gymnastic of the mind. Happy the children who are educated here from their sixth year! Could all schools be changed into such educational institutions, after a few generations a more intellectually powerful, and in spite of earthly sins, a purer, nobler people must be formed. Of this I am so firmly convinced, that I congratulate my fatherland for possessing within its borders an institution that even in its present development, can measure itself with the best in our borders, and whose reputation will spread far beyond the limits of Germany.

With deep respect for the Princely Consistorium,

Your most obedient subject,

May 6, 1825.

CHRISTIAN ZEH.

THE UNITY OF LIFE.

From Dr. W. Lange's *Aids to the Understanding of Froebel*.

This word (*Lebensvereinigung*) was always in Froebel's mouth; indeed, he not rarely named his method of education "the culture of man for all-sided unity of life by a developing education." His philosophy set out from life and ended with life. As I have already previously endeavored to explain, he looked upon the universe as a great organic whole, which is "pervaded and penetrated," "lightened and illuminated," upheld and taken care of by the spirit of God. He did not exactly identify the Divine Spirit with the life of nature; nevertheless the immanency stood out more distinctly than the transcendency, in his conception of God, as Johann Heinrich Deinhardt has very justly remarked. The tree, "the rector in his *Gymnasium*," had taught him that the essence of an organic whole is found also in each member of that whole, and that a member must be comprehended in a two-fold manner: once in its independence, self-sufficiency, and exclusiveness, and then in its dependence upon the whole. Accordingly, the life of nature and of man was to him the life of God in individual form; in the life of the people he saw the individualized life of men, in the life of the family carried on in the right spirit he saw the individualized life of the people, and the individual man appeared to him, as to Schleiermacher, a "representative of humanity in a specific combination of its elements." God, as the final unity of all living things, is a creative being, and unfolds the infinite contents of his being by the stream of growth and self-development which continues to infinity. Development is the outcoming of a being from unity into manifoldness. The child, as a bud on the everlasting tree of life, must, like the first cause of his existence, shape his being out of himself by creative activity, and must be so guided that the bud may throw out roots which will strike into the everlasting life, so that stem, leaf, and blossom may arise, and so that in the fruit of his doing and living the divine and human may appear again in its unity, that is to say, that his deeds may spring from his inner being to the honor of God and the use and advantage of man. Education has to guide him so that he may be conscious in all his doing and striving of the purest motives and principles, and, above all, so that he may feel the unity of his disposition to will with that of God, who can only will the good, that is, education has to lead him upon the road to "union with God" (*Gotteinigung*); it has further to implant in him most deeply the feeling that he is a member of humanity and can only truly unfold his being in disinterested service to it; it has to give him the impulse for the process of "union with the world" (*Welteinigung*); in the third place, it has to guide him so that he may endeavor to put an end to the dualism in himself, the opposition between "flesh and spirit," between sensitiveness and sensibleness, between willing and performing, and so that the "law in his limbs" may come into agreement with the "law in his mind," that is, it has to incite him to "union with himself" (*Selbsteinigung*). But that only comes about by his being steeped by education as deeply as possible in the life of nature and in truly human life, that is, in human life which is wholly and disinterestedly devoted to the whole.

In order to expose the child to the influence of nature on as many sides as possible, he chose the different mountain valleys of Thuringia for the basis and ground of his institution, and it often sounded mystical and strange when he founded his choice of a place in reference to the peculiarities of the child's life. The Schälathal surrounded by the dark, rigid mountain with its pine woods and sterile soil, appeared to him particularly suited for the education of boys; the lovely Marienthal near Liebenstein with its rich vegetation and soft heights for the education of girls. He often exclaimed, enthusiastically, when he spoke of Marienthal, "I have now found the place for working out the last consequence of my fundamental thought. An institution for the culture of women could never have succeeded in Keilhau. Look at the mountain and country around and feel with me that nature will not have them there."

And how he appealed to the life of nature in Keilhau, from the beginning, as a co-educator for his institution for boys! He opened his "Universal German Educational Institution" on the 18th of September, 1816, in Griesheim, seizing the opportunity which was offered him by the widow of his brother and three orphan nephews, his brother's children, requiring his help. In June, 1817, he was obliged by circumstances to transplant himself to Keilhau, with his fellow-worker and bosom friend, William Middendorff, who had already come to his side in Griesheim.

But this pressure of circumstances seemed to him, according to his own words, the expression of the will of Providence, for nature here harmonized with the demands of his ideal. A miserable peasant's hut scarcely afforded room to the inseparable ones, and they were obliged to help themselves in this respect in a way which touches upon the comical; but nature opened her arms to them joyfully. With the little band of five nephews and one brother of their later true fellow-worker, Langenthal, they rambled over mountain and plain, and the mountain-spirit may have groaned when Middendorff bestowed new names on the heights and fountains, names of the first impression made upon him, and which afterwards really and completely thrust aside the historic names. Indeed, this bold troop cultivated ground and soil, smoothed the way over rugged heights, and created mountain resorts which afford the most various, the most charming, and the most magnificent landscapes. This spirit of cherishing nature, and of life in nature, and of unity with nature developed in consequence, Keilhau has retained; and if a malicious critic could discover nothing else peculiar in the institution, this spirit will breathe upon him, fetter him, and inspire him under all circumstances. So a short time ago a Schiller festival was celebrated all over the world; but has the "ideal man of Weimar" been honored anywhere more beautifully than by the troop of boys at Keilhau? They were obliged with great trouble to make a new path over the stoniest part of the Kirschberg, to cast away fragments of rock in order to reach a beautiful, quiet place which lies just opposite the Schiller height in Volkstädt. They planted flowers of many kinds, in the newly-won place, and at last the Schillerlinde, which now grows lustily out of a rocky world; and when the day of the festival had at last come, they ascended the newly-smoothed path, rejoicing and singing songs of freedom, and the youthful band heard, in view of the favor-

the seat of our immortal poet, what Schiller had been to the German people. Then there were bonfires and mirth of all kinds, so that even the gloomy owl thrust out a friendly face. Indeed and in fact, nature did her duty in Keilhau and does it to this day, and it has always been felt to be true what the last brave associate of the Froebel Circle said to me as an experience of life: "Nature first wins us lovingly and exercises its full influence on us when we take it under our care, and in its service learn how to strengthen our muscles and nerves." Froebel certainly carried out what he knew to be necessary; he knew how to steep his pupils deeply in the life of nature.

But he also wanted a truly human life, that is, one which is wholly and disinterestedly devoted to the whole, to have its influence, so he first connected himself with Middendorff, then with Langethal, men whom he had learned to know and love in the war, to whom he opened his "Idea," and in whom he found a ready sympathy and genuine enthusiasm for the cause. They were willing to sacrifice everything to the cause, and gain only so much earthly good from it as appeared necessary, indispensably necessary for a frugal life. For that reason the number of pupils was fixed at twenty, and upon that the plan of the educational building was drawn up. The chest, in spite of this small number of pupils, was to be open to all, and each worker was to take from it according to his need. It could almost be said of them as of the first Christians: no one had any wealth, but everything was held in common. But alas, in this circle there was far less of the "worldling's lookout" than of the "enthusiast's earnestness;" there was wanting a necessary element, which first came later with Barop's entrance into it. Even the delicately cultivated and noble Henriette Wilhelmine, from Berlin, whom Froebel chose for his wife in 1818, was not able to supply the deficiency that existed, but rather stood completely on that side, and was in no way fitted to make allowance for the practical needs. They had forgotten in drawing up the original plan, that capital was necessary for building houses, and that with their very limited resources, the moderate income could neither cover nor pay an increasing burden of debt. In this way they soon came into straits which paralyzed their ideal flight. They had also forgotten that a time would come in which the fellow workers must think of founding families. They had sacrificed the most brilliant prospects, and were ready for every other sacrifice, but not ready for celibacy. It was also part of Froebel's plan to connect families with his educational aims.

The increasing distress of the circle seemed, in spite of the worm which was gnawing the heart of the tree, to be ready to come to an end in 1820. At that time, Christian Ludwig Froebel, the third brother of Friedrich, left his lucrative manufactory at Osterode, in the Harz, and placed himself, his family, and his means at the disposal of his brother. The heroic deed of this man was explained by the fabulous power of attraction which Froebel exercised over all those whose inner life touched his, even in a measure; also by the character of Christian, who was a true Cato in sentiment, and dominated by the most ideal striving. He was now to manage and to supply the externals, which all darkly knew to be a great need. But a personal weakness of Froebel allowed this experiment to be wrecked.

He was conscious of his originality, he expected in all the same susceptibility for that which animated him, and therefore looked into the future in the most pressing circumstances intoxicated with victory, but alas! he did not recognize himself as autocrat in reference to the thought alone, but also in points of its application. He did not give himself the trouble to inquire into the peculiarities of his fellow workers, and to make the best of them for the service of the whole. Differences of opinion often appeared to him as the promptings of self-seeking, he took just blame for abuse. Froebel, who sought to develop independence in his pupils, and really developed it in them, could neither recognize nor esteem, in his fellow workers, this grand attribute of character, which first makes the individual a real man. Thence it came that nothing essential was changed by the entrance into the family of his brother, who soon cast his economical superintendence at his feet; that Henriette Wilhelmine still managed unpractically in the house, while the family of her brother-in-law, who afterwards made Keilhau great, were obliged to lay their hands in their laps; hence came the gradual sinking of the institution, which at the end of twenty years reached its utmost limits, but did not go completely to ruin. For in spite of all the disappointments, the men of the circle, Middendorff, Langenthal, Christian Ludwig, lost not a moment in their endeavors, and never repented of refusing the most glittering prospects and all material well-being in order to serve the "Idea."

The "truly human life" of the circle was thus saddened in many ways, and Froebel did not reach in this regard what he was striving for. Happily for Keilhau, new prospects opened upon him. He went forth into the world. Middendorff seized the helm, and when he, unshakably true till death, was called to Switzerland, the work of Barop began, who had the goal firmly in view, and firmly followed it, and lifted Keilhau completely from its economical abyss. The documents upon the work of this man, who is still in the midst of a far-reaching activity, and was now recognized and praised highly by Froebel, now formally abjured, are not yet finished, and cannot yet be finished. Certain it is that he and Middendorff were the only ones who practically held a curb over Froebel, and that out of the whole circle three human stars, Froebel, Middendorff, and Barop, take the precedence as Pestalozzi did far above all other phenomena of their educational circle; and it is worthy of remark, that these men not only consecrated their own powers, but their whole families to the service of the idea; for Middendorff and Langenthal married in 1836, and Barop in 1831. They also left wife and child, as I have remarked in my description of the work in Switzerland, without murmuring, whenever it was required by circumstances. Truly such lives, such capacity of sacrifice, are hardly to be conceived of in the present times; the sense of it has been lost.

If then the "unity of life" of the families of Keilhau found imperfect expression, it still existed, and alone made possible the work of Friedrich Froebel, who, great in creative power, was small in administration and government. And certainly at least three of the united families stood quite out of range, when Froebel complained at Blankenburg on the 7th of January, 1838, "My whole life is a battleground between the uni-

versal and pure elements of humanity and the special disturbed human element, the personal, individual, and truly selfish striving of individual men." This battle must be met with in life, and must be fought out; but since pure humanity has its source and its sanctuary in the inmost recesses of family life, that battle had, of necessity, to take place in the inmost recesses of a family which is striving to preserve unity within itself and to manifest outwardly the purest humanity.

In spite of these drawbacks, the Keilhau circle were all one in reference to the principles of education and instruction. The children enjoyed the greatest freedom. A continuous, intimate communion between teachers and pupils exerted a deep influence. Love and self-sacrifice, as well as independence in knowledge and action, were developed and strengthened, and the individuality of each was fostered.

The instruction aimed at an all-sided stimulation to human activity, receptive and productive, especially the latter. The curiosity of the children was excited by giving them ideas of things, and bodily labor was called into play. Thus the need and desire for explanation and instruction were awakened. For this purpose the children were not only kept cultivating nature, but taken into all kinds of workshops and kept at all kinds of technical representations. It would be out of place here to describe this kind of instruction fully. The elements of many things were there brought to light, which were carried out later by other persons who now have the credit of them. For instance, Spiess, the reformer of the gymnastics, got his fundamental ideas from Froebel at Burgdorf, though he improved upon them. Froebel's one-sided traits prevented many buds and blossoms from unfolding, and in the domain of instruction even came forward often in the most disturbing manner. When the first pupils grew up, the need of higher scientific instruction showed itself, but almost too late. Important men, Bauer, for example, later Professor at the Friedrich-Wilhelms-Gymnasium in Berlin, whom Froebel had already learned to know in the war, Michaelis, and others, offered their services, and wanted to devote themselves, like Middendorff and Langethal, to the united efforts. But Froebel would even interfere where he had no positive insight, and in this way, as well as by his vehemence, which hardly bore contradiction, he so offended these scientifically versed men that they either went right away or did so very soon. Middendorff always, and Langethal for a long time, had the self-control to bear many grievances from Froebel, to overlook his weak sides, and in the service of the Idea to keep constantly in view his mission as the creator of the spirit of the circle. But Barop was, after all, the most prudent; he accepted his ideas, and then acted according to his own judgment and conscience, without allowing himself to be disturbed by contradiction, mourning inwardly that Froebel was not always in a condition to respect and support what was individual in his fellow-workers.

I have already told what was accomplished in Switzerland by the "unity of life" of that one family, and how gradually the idea of the Kindergarten arose. But there was need of a greater number of suitable families to carry out the idea which, as soon as Froebel perceived, he immediately turned to the community.

Progress—Interdict in 1851.

Owing to his restless and itinerating habits of work, Froebel's institutions of education did not attain to any considerable local reputation, so as to attract visitors or Press notoriety, nor did his own publications, setting forth his peculiar principles and methods in didactic form or in annual programmes, wake much discussion, or even win, by their style or novelty, the attention of educators. But, in spite of embarrassments inevitable to inadequate resources and insufficient assistance, with a few staunch and appreciative disciples he did succeed, after thirty years' study and experimentation, in concentrating his energies and developing his educational views in two institutions—one of which was a place of domestic and general education, and the other of special child culture, with much prominence given to training young women for the management of similar institutions elsewhere. His own presence and that of his gifted and devoted associate, William Middendorf, was welcomed to Dresden and Hamburg, and other places, to establish Kindergartens and interest women in their own self-improvement.

In this condition of affairs, he had the good fortune to attract the attention and win the friendship of the Baroness Von Marenholtz-Bülow, whose social position and personal influence soon brought him and his work to the notice of eminent educators and government officials; and, in 1850, it seemed as if henceforward his last days would not only be his best days, but that the calm serenity of assured success would crown a life of restless and apparently unproductive activity. The great popular educator of Germany, after much distrust arising from imperfect knowledge, had endorsed the originality and immense practical value of Froebel's Idea and Methods, and secured for him and them recognition in pedagogical journals, circles, and conventions. The governing families of Thuringia had manifested their interest in him personally, and were ready to adopt the Kindergarten in the early training of their own children.

In the midst of this peaceful and successful work and such brightening prospects, the interdict of the Prussian Minister of Education fell with stunning effect on the Froebelian circle, shortening the life of its founder, and bringing the Kindergarten into a disrepute with the conservative classes in Germany, from which it has not yet recovered. The Baroness Marenholtz-Bülow has told the story with simple pathos in her admirable *Reminiscences of the last days of Froebel*—the sharp surprise on reading the ordinance of August 7th, 1851—the haste to clear up an evident mistake of person and aim—the indignation at the perverse misunderstanding of the Minister—the sickness of the heart which comes from hope deferred in spite of the tender appreciation of those who knew the whole truth, and the sublime reliance in which he resigns himself to temporary misconception and obloquy, in the faith of the ultimate triumph of the right.

The ordinance was revoked by the new Minister in 1861, but the intelligence could not reach the dull cold ear of death, or soothe the heart which had ceased to beat on the 21st of June 1853.

LAST DAYS OF FROEBEL.*

At Whitsuntide of 1852, Fröbel attended by invitation, the Teachers' Convention in Gotha. When he entered the hall in the midst of a discourse, the whole assembly rose. At the end of the discourse the president of the meeting gave him a hearty welcome, followed by three cheers from the whole assembly. Fröbel thanked them in a few simple words, and immediately taking up the subject in hand, which was "Instruction in the Natural Sciences," was listened to with profound attention.

After the Convention, Fröbel was made specially happy in the garden of a friend of nature in Gotha, where he examined almost every group of flowers, and happily and gratefully acknowledged all the good things that were offered him.

In the kindergarten of Gotha he explained the intellectual significance of some of his occupation-materials. In the evening he took part in a reunion of the friends of his cause, although he was somewhat exhausted by the excitement of the day; he spoke of the importance of the kindergarten for the female sex, and the duty of teachers to learn to understand it on its own theory, and prepare for its introduction into the schools.

During his last illness (June 6), his repose and cheerfulness never left him for a moment, and he took part in and enjoyed everything, particularly when flowers were brought him. He once said on such an occasion, "I love flowers, men, children, God! I love everything!"

The highest peace, the most cheerful resignation, were expressed, not only in his words, but in his face. The former anxious care to be active in his life-task resolved itself into trust in Providence, and his spirit looked joyfully in advance for the fulfillment of his life's idea.

On the Sunday before his death, a favorite child came to bring him flowers; he greeted her with unbounded delight. Although it was difficult for him to lift his hand, he reached it out to her, and drew the child's little hand to his lips.

The care of his flowers he recommended in these words: "Take care of my flowers and spare my weeds; I have learned much from them." And in his very last hours he asked again for flowers. The window must be opened frequently, and he brightened up visibly at the aspect of nature, and often repeated the words, "pure, vigorous nature"; and at another time, "Always hold me dear," also, "I am not going away, I shall hover round in the midst of you." He spoke much about truth to Barop, who had come with the teacher Clemens, saying, among other things, "Remain true to God."

He then asked them to read his godfather's letter, which in Thuringia, according to old custom, was given to the baptized child by the god-

* Reminiscences of Friedrich Fröbel, by Baroness von Marenholz-Bulow. Translated by Mrs. Horace Mann. 359 pages. Boston: Lee & Shepard. Price, \$1.50.

father, and contained the confession of Christian faith. In some places he exclaimed, "My credentials! my credentials, Barop!" especially at the passage in the confession, "from this time forth our Savior will confide in thee in justice, grace, and mercy." For the third time he cried out aloud, "My credentials!" at the words, "Let my son hear! look upon and hold with immovable truth to thy soul's best friend, who is now thine." It was as if he would say, "To him have I been consecrated from the beginning of my life, and I have never in my life neglected this bond."

One could see how earnestly his Christianity dwelt within him, little as he was ordinarily accustomed to speak of it. Thus he said in the Teachers' Convention at Rudolstadt: "I work that Christianity may become realized." Another time he said: "Who knows Christ? But I know him, and he knows me. I will what he wills. But we must hold to his testament, the promise of the Spirit." He repeatedly admonished the friends around him in Keilhau "to preserve unity, concord, and peace; to lead a model life, as one family, in a united striving. Have trust in God; be true to life!" And ever and again he expressed love and thanks to those around him. At midnight of the 21st of June the last moment approached. His eyes, which had been closed for rest, were partially open. He was in a sitting posture, as if his wish to find his last rest sitting up was to be fulfilled. His breathing became shorter and shorter, till, at half-past six, he drew two long breaths, and all was still.

So quietly, without a struggle and without a death-throe, ended a life which had at no moment served selfish interests, but was devoted wholly and completely to humanity, and to childhood in humanity.

Middendorff added to his communication about Fröbel's last moments: "It involuntarily drew us who stood around the death-bed to our knees. We felt near the consecrated one. Never was the awe of death so effaced to me. I had felt something similar to it at the death of a beloved child. Nature made her last struggling efforts, and then stood still untroubled. The mind, clear to the last, fervent, joyful and loving, went home like a child to its pure source; a life well-ordered in all directions, united within and without, was fulfilled and closed. What he loved so much, and so often gazed upon on a clear evening,—the going-down of the sun,—he himself represented. As the sun sinks to our eyes, so sinks to our eyes the light of his being; and as, at sunset, I have no thought of its passing away, but only of its receding from view, and thereby know the certainty of its return, so I felt here in sorrow the certainty of the eternal duration of life. Yes, true is the promise, 'Death and lamentation shall be no more.' As he often, when plunged in meditation, penetrated to the light of a new thought, so his mind, freed from all limitations and absorbed in his inmost soul, in his own being and life, penetrated to a new existence,—to the light of another day.

"O, what stillness, what deep stillness, now! Consecration and holiness breathed around me. I felt joy in the midst of my pain! He who stood so near to nature, and not only saw, contemplated, and investigated it, but who was sunk in it as a child in purest love on the breast of a mother,—he had followed its teachings, trusted implicitly its laws and holy commands, had not been deceived in his hopes; and how it had rewarded his love. In his illness, he had been as quiet and gentle as a lamb. He scarcely allowed an expression of pain to be heard; no murmuring, no unwillingness, was perceived. True son as he was to Nature, so was she his true mother, who took him softly and lovingly into her arms.

"But how could he have trusted her so well, if he had not clearly known who she was,—if he had not known who inspired her and penetrated her, who governed her and wrote her laws, held her together in unity and self-consciousness, and kindled intelligence of her in the human mind? How could he have been so serene, if he had not known himself to be a son of that Almighty One,—if he had not recognized and known the first of men who lived this unity of the Son with the Father, and had not felt himself one with him in all his striving? How could he have been so cheerful, if he had not carried within himself the knowledge that the consciousness of the Sonship of this only One would break forth by degrees in all sentient beings, and thus the conscious unity and salvation of the minds for which he lived and struggled would surely and certainly appear? Therefore were his last words to his friends the prayer with which he closed his work upon earth,—*'God, Father, Son, and Holy Ghost. Amen.'*

"My soul was full of thanksgiving for the favor vouchsafed to me that I could close the eyes and bestow the last cares upon him to whom my dying father had commended me, and who had received me upon his breast. How grateful it was to my heart that it was my duty to be so near, at his last moment, in his last battle, to him whom I had accompanied so long in life, with whom I had fought the battle, with whom I had, for a time, worked and suffered the heaviest trials! Chiefly was I thankful because I saw this life, end as it had begun,—because I saw that he was what I had heard and believed him to be, and that he remained wholly in unison with himself; for to the last moment was revealed this repose springing from inward concord,—this clearness, truth, and unity. As he himself characterized it, *'One must himself perfect his life to a ripe fruit.'* And so his life dropped as a ripe fruit from the tree of the life of humanity. So can and also will be fulfilled what he said: *'The age of ripeness is coming.'* And again: *'The fragrant flower has withered, but the fruit has set which will now ripen. Behold in it three in one,—the connection with the earlier time, the steady advance in the present, and the seed of the future.'*"

Of the burial-service Middendorff said: "The bier, adorned with garlands of flowers and a laurel crown made by the wife and pupils,

stood in the place where lately Fröbel's bed had stood. All gathered round to look once more upon the beloved friend, and to gain an ineffaceable impression of the dear features. No trace of pain was to be found upon the countenance; a holy earnestness and inward cheerfulness shone forth from it. It was a look of introspection united with a light, blissful smile. The countenance showed an extraordinary tenderness. The lips were slightly open, as if his mouth would pronounce the secret of the other world,—as if it said, 'I see in light what I have here seen darkly. Believe, follow the truth; it leads to freedom, to bliss.' There is something striking in standing before such a countenance; the soul becomes a prayer. We sank upon our knees. 'O might we all die like him, and rest in the grave with such a certainty!' was the expression of one of the bystanders. The bier was carried out first through his work-room, where he had labored with unwearied industry, often half through the night, for those near and far, under the impulse of the living idea in himself and his all-encompassing love for humanity; past his beloved flowers, of which he took such care, and which, as if from gratitude, made plain to him the highest truths, like his yet dearer pupils, the children: then through the sitting-room, where Pestalozzi seemed to call to him from his portrait,—'Slowly, step by step, will be laid the sure foundation for the temple of pure humanity,'—and the divine Madonna looked at him as with thanks that he had so deeply divined her heart's desire, and shaped it into deed and love for all; and finally through the lecture-hall, where his scholars had listened with rapt attention to his words, which kindled them to their high calling,—where strangers from north and south had thronged together, and from whence they had gone possessed by the might of truth. As one said, 'He does not preach like the learned, but his speech is powerful;' and many of these have widely borne the seed with his motto, 'Come, let us live with our children!'

"The garlanded bier was set down in the spacious vestibule, to be strewn with wreaths and flowers by the numerous children. All, even the smallest, tried to show their love and gratitude to him once more.

"But not only children came; friends, known and unknown, pressed forward to show their esteem and reverence; the teachers of the country round about, one and all, kindergartners and those he had befriended, came even from a great distance, invited by their own hearts to that solemn day.

"The teachers united in a solemn song, in moving tones. Then the train was set in motion towards the churchyard of the village of Schweina.

"A heavy shower fell while it was on the way, so that we were obliged to stand under shelter for a long time. Parson Rucket remarked, 'Even his last journey is through storm and tempest.'

"When the procession was again set in motion, and passed over the bridge of the brook, Ernst Luther, a descendant of the great reformer,

whom Fröbel and his brother had educated gratuitously in Keilhau, out of regard for his ancestor, said, 'Thirty-five years ago to-day he here led me by the hand through Schweina.'

"The bells of the village church began to toll; it was so earnest and sacred, as if these solemn peals called him to come up into the land of the blessed, and said with their voices that the night had passed, that we should hasten to follow his onward, conquering banner, and build the new world by means of the children! At the gate of the churchyard the teachers took the bier upon their shoulders, to carry it to the place prepared for it.

"The newly laid out churchyard, situated outside the village upon an eminence, has a singularly beautiful location. The town lies half concealed in verdure, at the foot of a tower which rises up alone, like a finger-post pointing to heaven; the whole glorious country lies spread out before the eye like a living picture. At the left, Altenstein, with the summer dwellings of the ducal family, stretches out its high hand with noble grace, as if protecting the young colony, showing by its act that it truly reverences the cross which is erected in memory of Bonifacius, the earliest promulgator of Christianity here. Directly in front stands the old castle of Liebenstein, whose name has a good sound near and far for its healing springs; and on the right, shaded with lofty poplars and surrounded by green meadows and waving fields of grain, with the murmur of clear waters streaming from the rock of Altenstein, the quiet, lovely Marienthal, the seat of peace, of untiring work for the worthiness and the unity of life, consecrated by him who had now come to this spot for undisturbed rest and harmony.

"Notwithstanding the storm and the rain which still continued, a large part of the community had assembled, and mothers and fathers, maidens and youths, and numerous children stood around the open grave. The venerable old burial-hymn, 'Jerusalem, thou lofty city,' was sung. Then Pastor Rückert began his address at the grave, and at that moment the rain ceased. The address began with the following words:—

"Up to the lofty city of God soars the spirit of the man whom we now, grieving, gaze after; far above mountain and valley it soars over all and hastens from this world. Loved, honored, admired, praised by some, misunderstood, misapprehended, calumniated, condemned by others, he soars over all. The body which for seventy years served this rare spirit as a vigorous instrument, after the last spark of this richly active and remarkable life has gone out, shall now rest here in the churchyard of our community, which with pride counted the great man among its citizens; in sight of this mountain which he not long ago climbed with eagerness, of this house of God where he celebrated with us piously the feast of Pentecost, of the lovely Marienthal where the noble old man had found in the evening of his days a peaceful refuge for his philanthropic activity.

"'Blessed are the dead who die in the Lord from henceforth, saith the spirit, that they may rest from their labors; and their works do follow them.' These words belong to our dead also. . . . Yes, this is one who died in the Lord. He has lived in the Lord, therefore he has also died in the Lord, sweetly and happily.'"

The following passages from this discourse may be added here:—

"The fame of knowledge was not his ambition. Glowing love for mankind, for the people, left him neither rest nor quiet. After he had offered his life for his native land in the wars of freedom, he turned with the same enthusiasm which surrenders and sacrifices for the highest thought, to the aim of cultivating the people and youth, founded the celebrated institution at Keilhau among his native mountains, and talked, and planted in the domain of men's hearts. And how many brave men has he educated, who honor his memory and bless his name! . . . But then the thought came to him that the educators of men must imitate the creative and productive divinity in nature, which prefigures and determines the future plant in the tenderest germ, shields and protects it carefully, out of the smallest and simplest, gradually and step by step develops the highest and the noblest; that the body and soul of the tender little one shall be brought from the earliest childhood under a more intelligent and more careful nurture than has been done heretofore, when children were sent to school already corrupted in body and soul; and that, above all, this loving nurture should be trusted to the tender hand of women, whom the heavenly Father has created for this maternal calling; and to found such kindergartens, and to train such kindergartners, was henceforth his whole endeavor, from which he hoped with full confidence for the future salvation of humanity, and the deliverance from manifold bodily and spiritual ills. . . .

"To this high aim he now sacrificed all his powers, his property, his time, his repose. And perhaps children of his own were denied him by the decree of the Eternal Wisdom, that he might not be bound and limited by the cares for his own, that he might see and love in the poorest human child the child of God, and in the eye of every child might read the command, 'Thou shalt take care with all thy strength that the divine image be not defaced or distorted; thou shalt, with all thy gifts, work and help that it be preserved and shaped more purely and beautifully, and that not the least of these be lost.'

"For this he labored now; he moved about unceasingly teaching and working, imitating the Master, who had not where to lay his head; gathered unto himself little children, and laid his hand upon their heads and said, 'Suffer little children to come unto me, for of such is the kingdom of heaven.' For this he labored into the late evening of his life, and thereby the venerable old man himself was made young again amongst the playing children. For this he lived, for this he suffered, and regardless of the cry 'Hosanna,' or 'Crucify him,' he took his cross patiently, and bore it after his Master, and submitted trust-

ingly to abuse, calumny, and persecution, and Christ-like, pardoned the deluded ones who knew not what they did, since he knew well that the disciple was not above his Master. However, the mental excitement and effort which these struggles cost him contributed to break up the vitality of the vigorous old man. . . . So have we too, among whom he spent the last years of his life, learned to know and to love this guileless soul, this pure, childlike nature; you will all bear witness, even if you did not hear his last pious words, this our dead died in the Lord, for he lived for the Lord. Henceforth, lack of understanding and misunderstanding will no more afflict thee. Just souls are in the hands of God, and no pains touch them. Thou hast now found peace, and heaven, which thou didst foreshadow among thy dear little ones in the vale of earth, now surrounds thee with its purified indwellers, whose image our innocent children are. . . . The fruits of thy toil wilt thou there enjoy; from the abode of holy spirits thou wilt look with transport upon the plantation which thou hast founded upon earth. And here too shall thy works not perish. Works like these, instituted out of pure love to God and to man, without selfishness and ambition, are wrought in God and cannot perish. Thy work will be continued. If thou art now laid to rest, others will rise up and carry on the work. The seed which thou hast sown will, ripening in quiet, always bring richer and richer harvest for the salvation of mankind. May the earth which rises over thy grave, pious soul, rest lightly upon thee, and when moss and turf grow green, and flowers bloom over this heart which beat so warmly for its brothers; when the little ones with whom thou didst play shall have grown gray, then will posterity bend its steps to this pleasant burial-spot, and crown it with garlands, and some strong man will tarry here thoughtfully, thanking and blessing thee, and the spirit within him will say, 'Here a great, noble heart rests from its work; it has labored for the earliest childhood and for the latest future; labored in hope, and its hope was not lost,—his works follow after him.'"

I quote again from Middendorff's letter :

"The teachers sang the song, 'Rest softly,' etc. Then the coffin was lowered into the grave, which was filled with flowers. The heavens had withdrawn their dark curtain, and the sun shone down into the open grave. I stepped forward and said: 'If thy ear were not closed and thy mouth not dumb, thy lips would now open and thou wouldst exult over what thou hast heard, that that of which thou wert so certain has already been fulfilled, even though in a small circle,—the *acknowledgment* of the truth proclaimed by thee. . . . Even thy last journey was through storm and tempest, as has been already said. Thou hast taken the storm and the heavy way for thy companions, and hast reminded us what journeys thou didst make through thy whole life in night and tempest, and what heavy ways thou hast traveled for us. Thou permittest us now to proclaim the not-to-be-forgotten truth

that he who is with thee, and will follow thee, must be ready to follow thee through storm and through toil and hardship; must be ready for what thy life has taught, '*Through conflict to victory!*' Thou hadst not merely the courage to pledge thy life in war, in peace also hast thou pledged it again and again, and joyfully hast sacrificed all to thy cause.

"Thou didst often say, 'I like the storm; it brings new life;' the lightning which on our way here flashed out of the cloud shall remind us that the darkness which still obscures the time can be rent and illuminated by a mighty ray; it reminds us how thy words, thy inspired action, fell like a fire-flame into the dark heart, summoned the sleeping conscience to awake, and made clear to itself the darkened mind. Does not one (the descendant of Luther) stand here by my side, who feels now in his heart, with burning thanks, how thou didst lead him many years ago in the path of a worthy existence? Will not many of those present confess that thou hast thrown into their minds a kindling and illuminating torch, hast opened up to them new ways of culture, and hast furnished them the means of turning the kindled thought into act? and for how many maidens in the night of an embittered existence hast thou lighted the star of a better hope, and cast the saving rope into the dangerous breakers and drawn them to the green shore of child-nurture? . . .

"Thou callest upon us: 'You are my last witnesses, be my true disciples and heralds; be the true little band which shall always increase, and which the greater one shall join. Think of me and my words; He who was with me will be with you, and will give you courage and strength as he has vouchsafed it to me, even to the grave. . . . Thank me by silence and action, by a deeply penetrating insight and a united creative practice.' . . . There stand the mothers with their nurslings in their arms, their children by their sides, who bear witness that thou hast smoothed the way to the minds of men not only by the fire of thy speech, but also by the tones of song with which, like the delicious, caressing wind and the fresh morning breeze, thou hast imbued the hearts of the mothers.

"Now a song I had written for the occasion was sung, which was followed by the sacred hymn, 'Rise again, thou shalt rise again.' The pastor said, as he threw a handful of earth into the grave, 'May God grant to each of us such an end as that of this just man.'

"As the bystanders repeated this act, Luther cried with a loud and agitated voice into the grave, 'I thank thee, too.'

"The scholars threw flowers upon flowers into the grave; one took her bouquet from her breast and threw it in; then I cast in my song also, as the last gift.

"Mutually consoled, we separated quietly, and with inward confidence, to go in our various directions; and over the minds and feelings of all spread the wings of an exalted peace."

CONTENTS OF LANGE'S COLLECTED WRITINGS OF FRÖBEL.

VOLUME I.—<i>Frederick Froebel and His Development.</i>	1-549
1. Introduction by the Editor	1
A. Chronological View of Principal Events in Life of Froebel	1
B. Critical Moments in the Froebelian Circle	4
C. Unity of Life	14
D. Report on the Efforts of the Froebelian Circle	22
2. Autobiographical Letters	32-153
A. Letter to Duke of Meiningen	32
B. Letter to K. Ch. Fr. Krause	119
3. Froebel's View of Pestalozzi	154-213
4. An Appeal to our German People from Kellhan	204
5. Principles, Aim, and Inner Life of the Universal German Educational Institution at Kellhan	242
6. Aphorisms, 1821, with Preface by the Editor	
7. Concerning the Universal German Educational Institution at Kellhan	284
8. Upon German Education in general, and the Institution at Kellhan in particular	291
Appendix of Krause's Judgment on the foregoing Essay	A. 311
9. Report on Institution at Kellhan, with Plan of Study	322
10. The Christmas Festival at Kellhan, 1817	364
11. Announcement of the People's Educational Institution at Helba	399
12. Froebel at the grave of Wilhelm Carl, 1830	418
13. Announcement of the Institution at Wartensee	423
14. Ground Principles of the Education of Man, with a Study—Plan of the Institution at Willkau	428
15. Plan of Educational Institution for the Poor in the Canton of Berne	456
16. Plan of the Elementary School and Educational Institution in the Orphan House in Burgdorf, 1833	479
APPENDIX.—Letter to Christopher Froebel in 1801	524

VOLUME II, PART ONE.—*Education of Man, and other Essays.* 1-361

EDUCATION OF MAN.—

I. FOUNDATION OF THE WHOLE	27
II. MAN IN EARLIEST CHILDHOOD	27
III. MAN AS A BOY	64
IV. MAN AS A SCHOLAR	69
1. What is a School?	69
2. What Should Schools Teach	96
3. Chief Group of Subjects of Instruction	98
A. Religion and Religious Instruction	98
B. Natural Science, and Mathematics	108
C. Language, and Instructions in Language, with Reading and Writing in Connection	158
D. Art, and Subjects of Art	178
4. The Connection between Family and School, and the Subjects of Instruction Conditioned upon it	182
A. General Survey	182
B. Special Survey of Single Subjects	182
a. Culture of the Religious Sense	190
b. Culture of the Body	200
c. Contemplation of Nature, and the External World	208
d. Union of Poetry and Song	225
e. Exercises in Language	223
f. Pictorial Illustrations	245
g. Drawing in the Net	250
h. Comprehension of Colors	266
i. Play	275
j. Story-telling	277
k. Short Journeys and Long Walks	289

EDUCATION OF MAN—Continued.....	283
m. Science of Numbers.....	289
n. Science of Forms.....	303
o. Exercises in Utterance.....	307
p. Writing.....	319
q. Reading.....	323
r. Review and Close of the Whole.....	330
APPENDIX TO PART ONE.—Treatises Upon Different Subjects.....	337
I. ESSAYS OF THE YEAR 1836.....	340
A. The Being and Destiny of Man.....	340
B. Betrothal.....	341
C. Children's Plays and Festivals.....	353
D. Walking and Riding.....	358
E. The Little Child, or the Significance of its Various Activity.....	364
F. Cut of Child-life.....	397
G. The Science of Forms and its Higher Significance.....	413
H. Instructions in Science of the Earth, with a Chart of Schale Valley.....	462
II. THE YEAR 1836 REQUIRES THE RENEWING OF LIFE.....	469-501
VOLUME II., PART TWO.—Papers by Froebel in Different Periods.....	1-583
1. The Double Glance, or a New Year's Meditation.....	1
2. Plan of an Institution for the Fostering of Inventive Activity.....	11
3. The Child's Life—The First Act of the Child.....	18
4. The Ball the first Plaything of the Child.....	25
5. The Seed corn and the Child; a Comparison.....	47
6. Play and the Playing of the Child.....	48
7. The Sphere and the Cube the Second Plaything.....	58
8. First Oversight of Playing.....	79
9. The Third Play and a Cradle Song.....	82
10. Progressive Development of the Child, and Play Developing with the Ball.....	110
11. The Fourth Play of the Child.....	127
12. Second Oversight of Play.....	150
13. The Fifth Game.....	154
14. Movement Plays.....	162
15. A Speech made be'ore the Queen in 1836.....	223
16. Frederick Froebel, in Relation to the Efforts of the Time and its Demands.....	239
17. The Children's Garden in the Kindergarten.....	271
18. How Lina Learns to Read and Write.....	273
19. Spirit of the Developing Educating Human Culture.....	390
20. The Child's Pleasure in Drawing.....	351
21. Directions for Paper-folding.....	371
22. The Laying of Strips.....	389
23. The 22d of June, 1840.....	415
24. Plan for the Founding of a Kindergarten, and Report upon the Expense.....	426
25. Appeal for an Educational Union, with the Statutes of such a Union.....	434
26. Plan of an Institution for Kindergartners, and Kindergarten Nurses.....	453
27. The Intermediate School.....	501
28. Speech at the Opening of the first Bürger Kindergarten in Hamburg.....	533
29. The Play Festival at Altenstein.....	537
30. An Intelligible Brief Description of the Materials for Play in the Kindergarten.....	559

PUBLICATIONS RELATING TO FROEBEL AND HIS SYSTEM.

Under the title of "*The Froebel Literature*," Mr. Louis Walter, teacher in Dresden, has issued a pamphlet of 197 pages devoted to the publications which Froebel's system has called forth in elucidation, attack, or defence since Froebel issued the *Sonntagsblatt* in 1838.

The author does not claim to have exhausted the list of contributions, although it is evident he must have had in the Baroness v. Marenholtz-Bülow the best informed individual and in her own library access to the best collection in the world relating to the subject. The title page of each publication is given in full, with brief notice of the contents which enables Mr. Walter to classify these contributions as follows:

1. Written from the medical standpoint to the number of 16;
2. Do. from the Philosophical, 17;
3. Do. from the Theological, 8;
4. Do. from the Scientific and Official, 8;
5. Do. from the Pedagogic, 138;
6. Do. from the Journalistic, 47;
7. Do. by women, or women associated with men, 46;

making an aggregate of 335 treatises. Under the 5th classification is the names of 11 authors who are connected with gymnasiums or Real Schools; 17 with Teachers' Seminaries; 80 with the Common Schools; 6 with Institutions for feeble-minded children; and 24 with practical Kindergartners.

In addition to this classification Mr. Walter brings together the authors who treat of (1) Froebel's Life and Educational Work; (2) Froebel's System of Education; (3) the Kindergarten, its special aim and field; (4) Manuals of Method; (5) Material and Equipment; (6) Music and Songs; (7) Relation of Kindergarten to the School, School-garden, and School Shop; (8) Special Features of the New Education; (9) Related subjects.

Mr. Walter gives the address where the best Kindergarten Material and Manuals and Froebelian Literature can be had in different countries.

The last chapter is devoted to a list of authors arranged chronologically each year from 1838, the date of Froebel's first issue of the *Sonntagsblatt*. This list, with some modifications, or else a new bibliography, arranged alphabetically, we hope to print before we close our "Kindergarten and Child Culture Papers" in this Journal.

The interest in Froebel's system, judged from the publication standpoint, does not die out, there being more issues (30) in 1879-80, than there was from 1838 to 1850.

We give elsewhere a *List of Publications* relating to Froebel and the Kindergarten, which are accessible to American students, and hope hereafter, as is intimated above, to make that list complete up to the date of its publication.

* DIE FROEBEL LITERATUR. Zusammen stellung. Inhalts-Angabe und Kritik derselben, von Louis Walter. Dresden: Verlag von Alwin Huhle, 1881, S. xi + 197.

Mr. Walter is also the author of an interesting volume of 156 pages devoted to the Baroness von Marenholtz-Bülow's labors for the dissemination of Froebel's System of Education and Kindergarten.

Other works are announced by him: "On Diesterweg and Froebel"; "Development of the Froebel Idea in different Countries"; "Froebel's Place in the History of Pedagogy."

BARNARD'S CHILD CULTURE

KINDERGARTEN AND CHILD CULTURE PAPERS

AND SUGGESTIONS BY FRÖBEL, PESTALOZZI, FICHTE, MONTAIGNE, ROUSSEAU,
BUSHNELL, PAYNE, AND OTHERS. 800 pages, \$3.50.

Contents.

KINDERGARTEN AND CHILD CULTURE PAPERS,	1-800
I. Introduction—Miss E. F. Peabody,	1-16
Development of the Kindergarten,	5
II. Fröbel and his Educational Work,	17-126
1. Memoir,	17
2. Autobiographical Sketch of Home and School Training,	21
3. Aids to the Understanding of Fröbel, by Lange, Middendorf, Barop, Payne,	63
4. Genesis and Characteristics of the Kindergarten,	81
5. Publications relating to Fröbel and his System,	137
III. Middendorf's Labors for the Kindergarten,	129-144
Memoir by Diesterweg,	129
IV. Harenholtz-Hulow—Labors in behalf of Fröbel,	145-289
Memoir; Labors in Germany, France, Belgium, Holland, Italy,	145
This Child—Nature and Nurture according to Fröbel,	181
V. Fichte and the Congress of Philosophers in 1869,	290-326
Fröbel's system and Popular Education,	291
VI. International Congress and the Kindergarten, 1880,	327-369
Papers by Fischer and Guillaume,	329
Extension of Fröbel's system to Primary Schools,	330
VII. Child Culture—Early Manuals and Methods,	369-400
1. A B C, Horn Book and Primers,	369
2. The New England Primer and Saying the Catechism,	375
Fac-Simile of Edition of 1778—Webster's Reprint, 1844,	375
3. The Petty Schools of England in 1659,	401-416
Subjects and Methods with Little Children,	401
VIII. Object Teaching—in German Pedagogy,	417-448
Historical Development and Existing Manuals,	417
IX. Kindergarten Work and Papers in Different Countries, 449-560	
1. Fröbelian Institute—Berlin,	451
Schrader—Aldrich—Lyschinski,	451
2. Extension of Fröbel's System in Switzerland,	473
Madame de Portugal's Paper,	473
3. Child Culture in France and Belgium,	481-513
Cradle and Day Nursing—Infant Asylums—Kindergarten,	481
Intitutional Instruction in Model School, Brussels,	497
4. Kindergarten Movement in England,	513-528
5. Kindergarten Work in United States,	529-560
X. Reminiscences of Early Kindergarten Work,	537-580
Maria Boelte-Krause—Autobiography,	539
XI. Fröbel's Principles in the Nursery,	561-576
Miss Peabody's Lecture to Mothers and Teachers,	561
Miss Blow's Lectures to Teachers of St. Louis,	577
XII. Mother Play and Nursery Songs,	577-616
Some Aspects of the Kindergarten,	598
XIII. Fröbel's Principles and Methods in Public Schools,	617-622
1. Miss Peabody,	617
2. W. T. Harris,	628
3. Mrs. Louise Follock,	643
XIV. Kindergarten and Homes of the Poor,	637-679
1. Mrs. Horace Mann,	637
2. Mrs. Quincy Shaw's Charity Kindergartens,	637
XV. Kindergarten Training for Artist and Artisan,	673-690
Miss Peabody—E. A. Spring—Felix Adler,	673
XVI. Use of Colors in Musical Notation—D. Batcheller,	691-704
XVII. Free Kindergarten in Church and Charity Work,	705-726
Rev. Heber Newton—Mrs. Cooper—Miss Vankirk,	705
XVIII. Hints on Early Training,	727-764
Bushnell, Channing, Montaigne, Rousseau, Pestalozzi, Goethe, and others,	737
XIX. Building, Grounds, Equipment,	765-784
SUPPLEMENTARY PAPERS issued as called for.	

George Washington



Deputy A. Hawkins

DEXTER A. HAWKINS, AND PUBLIC SERVICE

IN UNOFFICIAL WAYS.

MEMOIR.

DEXTER A. HAWKINS, who, in the midst of a lucrative practice as a lawyer in New York City, has found time and energy to do a large work in the field of popular education and political reform, is a native of Canton, Maine. His progenitor, on the father's side, was Admiral Sir John Hawkins. His grandfather, Dexter Hawkins, of Providence, R. I., in 1777, at sixteen, volunteered in the 4th Bat. R. I. Troops, and served during the Revolutionary war. His father, the late Rev. Henry Hawkins, of Norway, Maine, was, in 1806, sent from Providence at the age of nineteen as missionary preacher to the then province of Maine; he was for sixty years an effective advocate of public education, and a vigorous champion of the abolition and the temperance causes when in their infancy. His mother, Nabby Fuller, was of New England Revolutionary stock, her father, John Fuller, being one of the famous crew of the *Bon Homme Richard*, when Admiral John Paul Jones captured the British frigate, *Serapis*, off Flamborough Head, in a contest that raged with almost demoniac fury till near midnight of the 23rd of September, 1779. He was afterwards taken prisoner, but escaped from the British man-of-war by leaping overboard in the night, and swimming two miles to the shore.

The subject of this memoir was born June 24, 1825, and to the advantages of an ordinary district school, had the instructions of his father. At the age of sixteen, as civil engineer, he surveyed and laid out, to the satisfaction of the Court, in midwinter, a public road and expensive bridge, respecting which there was litigation between two adjacent counties.

In 1842 he became teacher of mathematics in the Academy at Bethel, and subsequently at Bridgeton, where he completed, under Moses Soule, his preparation for college. He entered Bowdoin College in 1844, and graduated with honor in 1848—meeting the entire expense of his college education by teaching school and attending to business in the long winter vacations. In the fall of 1848 he was employed by Maine State Board of Education to lecture at the Teachers' Institutes; and in that and the three subsequent years

he gave a course of forty-five public lectures before the Teachers' Institutes, held in the several counties of that State, instructing in all over three thousand teachers in the science and practice of pedagogy.

In 1849 he became Principal of Topsham Academy, an institution for fitting young men for college, and preparing them to teach the winter sessions of the public schools. With such acceptance had he lectured and taught, that in 1851 he was offered a professorship of mathematics in a New England College, and also the secretaryship of the Board of Education; but with a strong predilection for the legal profession, he declined both, having already entered the office of Hon. William Pitt Fessenden, of Portland, as student of law. In the winter of 1851-2 he attended the lectures of the Law school of Harvard College, and in the summer of the same year visited Europe for an extended tour, to enlarge his horizon of public affairs, and study systems and institutions of education, and the proceedings of judicial tribunals in different countries, and to attend the Law School at Paris. While in London, in the summer of 1853, it was his good fortune, as the attorney of an American firm, to bring a long protracted litigation to a successful issue, by which his first fee (and a large one—\$1,000) was earned.

On his return to the United States, on the invitation of the Superintendent of Common Schools (Dr. Barnard), he assisted in conducting three Teachers' Institutes in Connecticut, in the months of October and November, and thus closed his active personal work in the professional education of teachers; and January 2, 1854, he opened his present office at No. 10 Wall street, New York, for the diligent and lucrative practice of law. But he has had the will and has found the time to take an active interest in the affairs of his own church, city, state, and nation, and at the same time enjoy, in a quiet way, all the comforts of domestic life, and give personal attention to the education of his children, two of whom are now (1881) in Harvard, one in Vassar College.

Although debarred, by an accident in his boyhood, from any military aspiration, he assisted, in the war of the Rebellion, in raising two regiments for others to command.

In the agitation of the subject of a national recognition of schools, Mr. Hawkins, through the press, and by personal correspondence with members of Congress, assisted in the establishing at Washington, in 1867, the Department of Education, which, in 1870, was made a Bureau in the Department of the Interior, at the head of which is the Commissioner of Education. Mr. Hawkins' plan and efforts were to make the Commissioner a Cabinet Officer, with administrative

functions extending to all institutions of science and education originated by the Government for its own purposes, or aided by national appropriations, and capable of expansion to meet the exigencies of the nation.

In 1869, and in 1871, he entered with his usual earnestness into the public discussion of the policy of the City or the State making appropriations of public property in aid of private, educational, and charitable institutions established by religious bodies for the care and instruction of orphan, poor, and neglected children, and others belonging to parents in connection with such bodies. Mr. Hawkins took decided ground against such appropriations—directing his researches and arguments specially against the large appropriations to Catholic institutions of this class. His pamphlets were widely circulated, and contributed largely to constitutional changes and legislation adopted by New York to limit the amount, and narrow the scope of such appropriations. His principal document was a Report to the Council of Political Reform, entitled, "*Sectarian Appropriation of Public Moneys and Property, and the Duty of the State to Protect the Free Common Schools by Organic Law.*"*

In 1873 the Council of Political Reform took up the grave evil of non-attendance at school, and to this body Mr. Hawkins addressed, in the name of a committee, a report on its extent, and the necessity of a law authorizing School Boards, in each city, town, and incorporated village, to require the attendance at some school, public or private, of all children between the ages of eight and fifteen years, unless for good and sufficient reasons temporarily excused. This report, under the title of "*Compulsory School Attendance,*" and "*Compulsory Education,*" has had a very wide circulation as a pamphlet, and has been largely reprinted in newspapers and magazines in this, as well as in other countries. In the State of New York it led to the enactment, in 1874, of a bill drawn up by Mr. Hawkins, entitled an "*Act to secure to Children the Benefits of Elementary Education.*" The same bill in substance has since then, on the strength of his arguments, been enacted in numerous other States and Territories, and will doubtless become the common law of the land.

The principle of compulsion is as old as the school law of Massachusetts in 1642, and of Connecticut in 1650, and in some form exists in most of the school codes of all European States. The impulse given, by Mr. Hawkins' bill, to the renewed discussion, and the more stringent legislation of several States, has already secured a larger and more regular school attendance. But the evil still

* See Barnard's Journal of Education, Vol. XXX, p. 617.

exists, and the problem of neglected children is not solved, and we fear will not be by any number of Truant Officers until a more vigorous and enlightened public sentiment is evoked from the consciences of parents. Our whole system of public instruction must be reconstructed from the foundation, so as to reach children between the ages of three and eight, by the Kindergarten and the Primary School, by which the home and the school shall be brought into direct connection through the warm, coöperating sympathy of parents and teachers. School attendance must be made a habit early in life, and private and parental action must be stimulated to secure this paramount object.

In the problem of reconstruction of the South, Mr. Hawkins, by pen and voice, labored to introduce the factor of the free public school. In March, 1875, he delivered an address in Boston on the subject, which was printed in a pamphlet of thirty-two pages, bearing the title of "*The Educational Problem in the Cotton States.*" With a convincing array of facts drawn from official sources, he demonstrates the proposition that it is the *interest* and the *duty* of these States to provide, by tax on property and other wise legislation, for the free elementary instruction of every child within their borders. He recommends an amendment of the National Constitution empowering the Federal Government, in case of any State neglecting to make this provision, to intervene in the interest of the whole country and perform it. This address was widely circulated, and even the entire pamphlet of thirty-two pages was reprinted in a large number of papers in the States directly interested.

In September, 1877, Mr. Hawkins delivered before the American Social Science Association, at the annual meeting at Saratoga, an address on "*Education, the Need of the South,*" bristling with the statistics of illiteracy among both whites and blacks, and demonstrating by solid arguments the inevitable results of such ignorance on society, business, and politics. The remedy pointed out was—wise State Legislation, aided by immediate and liberal coöperation of the National Government in the appropriation, for a term of years for free common schools, of the proceeds of the sales of the public land, and their distribution among the States, according to the number of illiterates in each. This address was widely copied in the public press of the South, and in the discussion which it aroused has helped largely to shape public sentiment for some decided action of Congress in this direction. A bill to this effect passed the Senate in December, 1880.

In 1871 a paper prepared by him at the request of Dr. Peck

(now Bishop Peck), on the "*Extravagance of the Tammany Ring*," was published in the *New York Times*, June 30th of that year, and by its wide republication in other papers helped to arrest the attention of the whole country to the astounding fact that in twenty-eight months an addition of over fifty millions had been made, without the knowledge of the people, to the debt of the City of New York. It led to the speedy overthrow of the ring.

The overthrow of the now "infamous Tweed Ring" led to the exposure of many devices by which politicians contrive to keep the people blinded to their movements by subsidizing the public press, and thus securing silence, or apologies, or open advocacy of measures of insidious and even flagrant enormity. When the scrutiny and approval of bills against the City Treasurer was transferred from a corrupt official to a man of Spartan integrity and firmness, Andrew H. Green, it was discovered that these infamous politicians had virtually in their pay in the city of New York twenty-eight daily and sixty weekly papers—eighty-nine organs by which the popular intelligence and public opinion were in a great measure formed. For five years over a million of dollars a year—the sum of five million dollars in five years, had been incurred under the guise of advertising for the city government. The Controller refused to pay these bills until the claims of each item was adjusted. Three millions had already been paid, and to override the decision of the Controller the claimants or their agents applied to the Legislature at Albany for a law compelling the city to pay. Many prominent lawyers, invited to appear for the city before the committee having these and other bills to deplete the public treasury, refused for want of time or adequate compensation, or unwillingness to incur the abuse of the parties exposed or defeated. Mr. Hawkins, on the application of the Controller, spent several months at Albany in the interests of the city. He showed that some of those bills had been already paid, and that the city held their receipts in full, but as a portion of the money had been divided with the "Ring," the papers wished to be paid again; other bills were shown to be charged at many times a fair price, and had already been paid more than was just; other claims were shown to be pure frauds,—a sheet of advertisements had been bought for a trifling sum, on which a newspaper heading had been printed, and then the whole page charged at forty cents a line; in another a whole file for a daily paper for six months had been manufactured out of a single issue contained in a page of city advertisements, by simply running the date in the heading back day by day for half a year, thus making the charge more than one hun-

dred and fifty times what it should be. In the face of these exposures several of these claims were withdrawn, and the Legislature threw out the whole bill designed for a public act. Since this exposure the city advertising has cost just one-seventh of the sum paid under the Tammany Ring.

In 1873, in a pamphlet, entitled, "*Donations of Public Property to Private Corporations and the Illegal Exemptions of the same from Taxation*," Mr. Hawkins shows that upwards of ten millions of public property in the City of New York had been given to private corporations, and that more than half of this vast sum escaped taxation. This exposure of the abuses of municipal legislation and administration led not only to local reform, but to an amendment of the State Constitution prohibiting the donation of public property to private corporations.

In 1879, within twenty-four hours after the publication of Governor Robinson's annual message to the Legislature, in which the Chief Magistrate had assailed for a second time the common school system of the State for going beyond the requirements of the old curriculum of reading, writing, and cyphering, and trying to provide teachers beyond the old district school standard—Mr. Hawkins addressed an open "letter to the Governor of the Empire State," the purport of which neither Governor Robinson or the State will soon forget. In this letter Mr. Hawkins exposes in clear, logical, and forcible language, the sophistical statements of the opponents of a graded system of public schools in all cities and populous districts; and shows the necessity of a higher grade for the older and more advanced pupils, in order to secure the instruction demanded by the duties of American citizenship, and the claims of intelligent and skilled labor, and at the same time give efficiency to the grades below. In our system of public (not charity) schools, the children of the poor and laboring classes must have equal advantages of education for citizenship as the children of the rich and professional classes; and to have good public schools, their teachers must be properly trained and adequately paid.

In 1873 Mr. Hawkins published a literary gem—"Traditions of Overlook Mountain," and in 1875 delivered the annual address before the Syracuse University "*On the Anglo Saxon Race—its History, Character, and Destiny*," which was printed both as a pamphlet and in the Methodist Quarterly Review. In 1880 he prepared a pamphlet on "*The Roman Catholic Church in New York City and the Public Land and Public Money*," which assails any further grants to religious bodies. It is published by the Tract Society.

CALEB MILLS AND INDIANA COMMON SCHOOLS.

BY PRESIDENT TUTTLE OF WABASH COLLEGE *

MEMOIR.

CALEB MILLS, for forty-five years an active member of the Faculty of Wabash College at Crawfordsville, Indiana, was born at Dunbarton, New Hampshire, July 29, 1806, graduated at Dartmouth College in the class of 1828, at Andover Theological Seminary 1833, was married to Miss Sarah Marshall, September 13, 1833, removed to Crawfordsville, Indiana, in November, 1833, and on the 3d of December, 1833, threw open the portals of Wabash College to twelve young men, the fore-runners of several thousand who have enjoyed its privileges since that memorable morning. He died October 17, 1879.

The class with which he was graduated at Dartmouth was remarkable for the part its members bore in educational work. Ten of them became college officers, and several of them distinguished themselves as such. Among these were Labaree, President of Middlebury College, Long, of Auburn Theological Seminary, and Young, of Dartmouth.

Of the forty graduates in that class, the three who are most likely to be remembered for permanent educational work, assisted in founding two colleges. Milo P. Jewett, a scholarly and able man, was for several years at the head of a large institution for young ladies in Alabama. After great success there he came North, and was the means of inducing Matthew Vassar to abandon the plan of building a hospital at Poughkeepsie, and in its stead to found and endow Vassar College. Not only did he do this, but he was influential in shaping its successful career.

Edmund O. Hovey was one of the original founders and trustees of Wabash College. In 1835 he became a member of its faculty. He continued a member of the board of trustees and faculty until his death March 10, 1877. *At his suggestion, in 1833, his classmate, Caleb Mills, was appointed the first Principal of the institution which became Wabash College, in which for nearly forty-six years he exerted a great and wide influence. It is seldom that any institution of learning can name as the offspring of one of its classes two such granddaughters as Vassar College and Wabash College.]

The official life of Professor Mills divides itself into two parts—his work in Wabash College, and his work in connection with the public schools in Indiana. The lack of time warns me to leave the first part untouched, except to say in a general way that he nobly and faithfully performed the duties connected with his position as college officer. He was honored by his associates in the college, and he won the hearts

* A paper read to the Indiana Teachers' Association, December 31, 1879.)

of his students. When God sent him and "his brother Hovey" to found Wabash College, he sent the pledge of success and the assurance that other blessings needed would not fail.

A distinguished friend of education who has never seen either of these men recently wrote concerning them: "There must be a very solid and deep foundation for an institution and its sacred aims to account for the unwearied devotion of two such men as Professors Hovey and Mills for nearly half a century. There is significance in such lives."

PUBLIC SCHOOLS IN INDIANA.

A native of New England, Professor Mills, was in full sympathy with its system of popular education. He believed the State ought to provide free education for every child, sufficient to enable him to be an intelligent citizen. This thought originated in Boston, in 1643,* and whilst it quickly spread throughout the New England States, it did not for a century and a half find a home elsewhere. In 1787 it became a constitutional element in the civil institutions that were to shape the destinies of that vast region which now includes ten States in the valley of the Mississippi, and, indeed, of all the States and Territories west of the Alleghenies, reaching to the Pacific Ocean.

Professor Mills, after his graduation at Dartmouth, had spent a year in the Theological Seminary at Andover, and then two years in extensive tours through Southern Indiana and Kentucky on an agency for Sunday-schools. This led him to determine to settle in the valley of the Wabash. In the January number, 1833, of the "Home Missionary" he saw an article written by Rev. James Thomson, of Crawfordsville, describing the Wabash country, and mentioning the classical school to be started at that place, "where a competent number of teachers may be trained to be spread over the country to teach the children of this rapidly populating district."

This led Professor Mills, then in his last year at Andover, to write to Mr. Thomson a letter dated March 18, 1833, from which I may quote some sentences, which show that as early as 1833, while he was still a student, he had planned what may be called his "Common school campaign" in Indiana. He ranks together "the cause of common schools and the preaching of the Gospel, as claiming the attention of a patriotic and Christian community." The Sunday-school is good, but "not sufficient for the mighty mass of mind that is now rising up." "My thoughts have been directed of late to the subject of common-schools, and the best means of awakening a more lively interest in their establishment in the Western country. Public sentiment must be changed in regard to free schools; prejudice must be overcome, and the public mind awakened to the importance of carrying the means of education to every door. Though it is the work of years, yet it must and can be done. The sooner we embark in this enterprise the better. It can be effected only by convincing the mass of the people that the

* Where is the evidence of such a genesis?—H. B.

scheme we propose is practicable; is the best and most economical way of giving their children an education. Introductory to and in connection with these efforts, we must furnish them with teachers of a higher order of intellectual culture than the present race of pedagogues."

Professor Mills, in this letter, speaks of his purpose to come West, and adds: "I hope to reach the Wabash country the last of October. Can you find me a good parish and a log house to dwell in?"

In June he again wrote Mr. Thomson, and says: "I am happy to learn that you intend to make the preparation of school teachers a prominent object in the establishment of your institution." It is a matter of higher importance to secure the right teacher for the English department than for the classical, because he will fit teachers for the common schools. He wants "to open the eyes of people to the incompetency of the present race of pedagogues." It seems as if he could not write a letter without filling it with pleas for the common schools, which Indiana needed so much.

He had been invited to locate himself at Paris, Jefferson county, Ind., and also to become agent for Marietta Collegiate Institute, in Ohio, but he says: "I cannot think of relinquishing my long-cherished plans of settling in Wabash county." It is also evident that he is gradually coming to the conviction that he ought to make teaching his own life work. He wrote Mr. Thomson what kind of a principal was needed for the new school at Crawfordsville, and in so doing, described himself unwittingly. "He should emphatically be a working man. He should not only teach, but lecture on popular education during vacations. An institution of this character, where teachers, both male and female, should be trained, would prepare the way for the ultimate establishment of a college."

And he also implies that Mr. Thomson had been speaking of him as a "candidate for the professorship of the English department in the new institution. Brother Hovey knows me, and is acquainted with my fitness and qualifications for such an office. Should I engage in such business I should devote my energies to it." He also says that when he comes he is to bring, besides his wife, two young ladies as instructors.

On the 18th of July, 1833, "Caleb Mills was nominated to fill the English department, and it was resolved that Mr. Mills be invited to open a school as soon as practicable."

His marriage took place on the 18th of September, soon after which he started for Indiana, and after a tedious and roundabout journey of six weeks reached Crawfordsville the 8th of November, accompanied by his wife and four teachers—three ladies, all of whom found schools.

I have sketched this part of Professor Mills' life to show the purpose he had in coming to Indiana. In his mind, long before he came to this State, lay the purpose of awakening public sentiment to the importance of organizing the public schools so as to carry the means of education to every door, and even when he consented to become principal

of the school at Crawfordsville "that was to grow into a college," one object was paramount "to train teachers for the common schools." He began the work of realizing his plans by organizing the first classes in Wabash College, December 3, 1833.

CONDITION OF COMMON SCHOOLS, 1833-46.

We now pass to December, 1846. The intervening period has been occupied with labor as a teacher, preacher, and agent. When traveling for the Sunday-school society he had noted the condition of the common schools in Indiana, as bad enough. A closer acquaintance with them had not raised them in his esteem. And what the schools were previous to 1846 may be inferred from the statements of witnesses. The country schools, for the most part, were taught in rude, badly-lighted, and badly-furnished houses. The most of the town schools and all of the country schools were taught by men the most of whom, if we may believe such witnesses as Governor H. S. Lane, were not fit for their place. There were marked exceptions to this rule.

From such narratives as those of Sandford G. Coxe, Barnabas Hobbs and others, it would be easy to reproduce the schools of the early times. The "sixteenth section" of each township was not always managed to the best advantage, and in any case was not sufficient to support the schools. The county seminaries relieved this shameful condition of the schools somewhat. In 1834 a careful witness declared "the state of common education in Indiana to be truly alarming. Only about one child in eight between five and fifteen years is able to read! The common schools and competent teachers are few." In 1840 there were 273,784 in the State of school age, of whom only 43,180 attended the common schools. One-seventh of the adult population could not read, and a large proportion of those who can read do so imperfectly. In spite of the constitutional provision of the State and the famous "sixteenth section," the common schools of Indiana were in a bad condition. As late as 1846 the State rated lowest among the free States as to its popular intelligence and means of popular education. Even the capital of the State did not have a free school until 1853, and then one was kept open only two months. And this was in spite of some noble educators in different parts of the State, working for a change. At Salem, Hanover, Indianapolis, Crawfordsville, and other places, were men who were seeking to awaken public sentiment in favor of public schools, but with little apparent effect.

MESSAGE BY "ONE OF THE PEOPLE."

In the Indiana State Journal of December 7, 1846, appeared a remarkable paper—a message to the Legislature of Indiana, signed "One of the People." At the time James Whitcomb, one of the most scholarly of the governors of Indiana, was chief magistrate of the State. "One of the People" said, in his first message to members of the legislature, "that whilst the Governor will in his annual message shed the light of

executive wisdom upon the path of your legislative duties" as to "many of the more prominent and important interests of the State," he has neglected one important interest. "Feeling that there is one topic which has not received from him, nor any of his illustrious predecessors for the last ten years, that degree of executive recommendation which its intrinsic importance demands, and the good of the Commonwealth requires, I have taken the liberty to address you for the purpose of bringing the subject before your minds for consideration at an early period of your labors. Some apology may perhaps be deemed necessary for the novel method I have adopted to accomplish my object. Novel as it may appear, it has nevertheless been taken with the utmost deference to your wisdom, and the sole desire to promote in some humble manner the great object that should be uppermost in the mind of a legislator, the good of the entire mass of his fellow citizens. . . . I have examined the proceedings of the legislature for the last twelve years, in earnest expectation of seeing the subject of education discussed and disposed of in some good degree as it deserves at the hands of the appointed guardians of the Commonwealth. And I am not alone in my disappointment, for I often hear my fellow citizens expressing their deep regret at the inefficient character of our common schools and the wretched condition of our county seminaries, to say nothing of a liberal and enlightened policy in respect to our higher institutions of learning." He then presents the humiliating facts as to illiteracy in Indiana. Not only every seventh adult cannot read a word, but "there are gentlemen on this floor representing rich and populous counties who, perhaps, never dreamed that one-sixth, or one-fourth, or one-third of their constituents cannot read the record of their legislative wisdom, nor peruse the eloquent speeches delivered in these halls! Putnam county, containing a University, has the sixth of its adults unable to read; Montgomery worse yet, having a college, and yet every fifth adult cannot read? Gentlemen from Jackson, Martin, Clay and Dubois counties must feel themselves very much relieved from the burden of sending newspapers and legislative documents to those whom they represent, when informed that only a fraction over one-half of their constituents can read or write." "Only one in three of the children of school age attends any school." And then, in a great variety of ways, "One of the People" urges the legislature to organize free public schools for all the children of the State.

It is a noble message, packed with startling facts, spiced with humor, and everywhere grand with common sense. And that message was the starting rill that has since swelled into the river. So well had "One of the People" in his message plead the cause of public schools that, eight days afterward, Governor Whitcomb for the first time opened his lips on the subject in some very pertinent words in his annual message. "One of the People" had moved the Governor to speak for the public schools officially. The author of the message by "One of the People"

was Professor Mills, of Wabash College. His secret was known only to enough friends to secure its publication and circulation, and was not divulged until some years afterward.* In this message, and, in the five that followed it, Professor Mills presented a remarkable array of facts, suggested plans, answered objections, and presented arguments, all bearing on the one objective point, the free common school for all the children of Indiana.

SECOND MESSAGE.

On the 6th of December, 1847, the second message of "One of the People" was laid on the desks of the members of the legislature. It also is a masterly document, in its figures and statistics exceeding the first, and developing quite fully the germinal idea of its predecessor. It uncovered the abyss of Indiana's illiteracy and the incompetent schools and teachers, and also stated the remedy.

As a result of this and other influences, the legislature passed an act at the session of 1847-'48 to take the will of the voters of Indiana on the question of free public schools. At the fall election in October, 1848, after a voter had deposited his ballot, he was asked by "the judge of the election," *viva voce*, "Are you in favor of free schools?" When the vote was counted, it was found that 78,523 had voted for free schools, and 61,887 against them, so that the voters of Indiana had endorsed free schools by a majority of 16,636, and it was surely one of the most important results ever reached at the polls in this State.

THIRD AND FOURTH MESSAGES.

On the 11th of December, 1848, "One of the People" addressed his third message to the legislature, in which he analyzes the vote on the free schools, and at once shows how it is to be carried into effect. The appeal is cogent, and had its effect. Like its predecessors, it was full of trenchant humor, of facts and of wise suggestions, and headed by the words, "Read, circulate, and discuss."

In December, 1849, "One of the People" addressed his fourth message to the legislature on the subject of popular education. This, too, is a noble document, and pressed the great theme which had been annually argued by him with renewed power. "The constitution has committed to your charge the primary schools, the only institutions to which nine-tenths of the rising generation will ever have access." And he urges the responsibility resting on them to devise such wise measures in behalf of these schools "that on the legislature of 1849-'50 may rest the benediction of the youth of Indiana, for having the wisdom to devise and the independence to enact such a system of free schools as may serve as a model to her younger sisters, while it secures the proper education of her own rising generation." After showing the deficiencies

* The Editor of this Journal received a copy of this and the other six messages, as issued from year to year, and they are, or should be now in a case appropriated to original documents relating to Common Schools in Indiana, in the Library of the Bureau of Education in Washington.

of the present system, and the remedy to be adopted, "One of the People" thus concludes this remarkable message: "With the fond hope that the statistics and suggestions contained in this address may be received by you, gentlemen legislators, as the contribution of one who desires to see the entire youth of Indiana enjoy the blessings of free schools, and the community experience the incidental results of such an education, and that all may have occasion to retain a long and lively remembrance of your legislative fidelity, wisdom and patriotism, I am, etc.,

'ONE OF THE PEOPLE.'

The legislature to which this message was addressed, after careful discussion by Governor Whitcomb's recommendation, passed an act empowering the people to call a convention for drafting a new constitution.

CONSTITUTIONAL CONVENTION.

The convention met at Indianapolis, October 7, 1850, and finished its work February 10, 1857. A very important part of that work pertained to the free schools. The leading newspapers of the State contained proof that some of the best men of the State were thoroughly alive to this great interest. Not a few able papers were printed, many of them anonymously, on the subject. In November, 1847, such a paper was published, asking that "the free common school system may throw its broad mantle over the thousands of the children of the poor—a helpless class of innocent sufferers—to shield them from infamy." This was signed by E. R. Ames, R. W. Thompson, S. Meredith, James Blake and others. A committee had prepared a sketch of a common school law to be presented to the legislature, but the report was that the convention for which it was prepared "was not large, and a great portion of those who were there at the opening of the meeting went away before its close." Judge Blackford presided. It was evident that the people needed much more light to bring them up to the required standard of interest. It would be a matter of historical interest to know who wrote in advocacy of free schools the articles which appeared in the Indianapolis and other Indiana papers. From internal evidence I think that Professor Mills wrote some of them over other signatures than those affixed to his annual messages. But other able pens were also at work.

JOHN J. MORRISON AND THE SECTION ON EDUCATION.

It was an omen peculiarly auspicious of good, that the people of Washington county had sent to the Constitutional Convention one of the ablest teachers the State has ever had, John J. Morrison, for many years principal of a school at Salem, and since that time honored with responsible offices. It is only necessary to consult the little book on "The Indiana Schools and the Men Who Have Worked in Them," and the eulogies pronounced on him by Barnabas Hobbs, Daniel Hough, and many of his pupils, to know how fortunate Indiana was in the ability and wisdom of such a teacher as Mr. Morrison at the time when the

public school system was to receive its type and place in the new constitution. He was the Chairman of the Committee on Education in the Constitutional Convention, and as Mr. Hough says, "he reported substantially the article on education, and was the sole author of the section creating the office of State Superintendent of Public Instruction.

In the *Indiana School Journal*, October, 1878, is an article from the pen of this veteran educator on this very point, nor can we appreciate its statement as to the office of State Superintendent without recalling the fact that Professor Mills in his "annual message" and other eminent friends of the free public school system felt that without some efficient supervision no scheme could succeed. They differed in respect to methods, but were agreed as to the necessity. In the original draft of Mr. Morrison's report, "was the eighth section, which provides for the election of a State Superintendent. By a majority vote in committee, this section was stricken out of the final report." This action was "regarded as a fatal blow against the State's undertaking to educate the children of the State." In this exigency the chairman "determined to submit the rejected article to the tender mercies of the Convention itself. To his great relief, after a somewhat stormy debate, the section rejected in committee was adopted, and ordered to be engrossed, by a vote of 78 to 50."

FIFTH MESSAGE BY "ONE OF THE PEOPLE"

His fifth message on popular education was addressed to the Constitutional Convention in November, 1850, by "One of the People," in a series of four sprightly and intensely earnest letters, first published in the *Indiana Statesman* and afterwards in other papers. The message was worthy the noble educator who had been pleading so long for the public schools of Indiana, and justifies the high eulogium passed upon its author by the venerable Morrison, who writes in a private letter, that "His messages from 'One of the People,' and his reports as State Superintendent of Public Instruction, if read in the light of subsequent legislation, will furnish ample evidence of the great service Professor Mills rendered to the public schools of the State."

SIXTH AND LAST MESSAGE.

The Constitution was submitted to the people and adopted by a large majority. In January, 1852, it went into operation, and on the 20th of February, 1852, "One of the People" laid his sixth annual message on "Popular Education to the Legislature," on the tables of its members. And so well recognized had he by this time become as the advocate of a scheme of popular education that was both essential and honorable to Indiana that the Senate "ordered 5,000 copies to be printed."

Inasmuch as this last of the six annual messages of "One of the People" is a business argument, it is not necessary to discuss its contents at any considerable length. It is enough to state its object. A

have that right was not less important than to have the Constitution itself right. He not only congratulates the people and the legislature on the "evidences of progress," "the approach of a better day," but he urges the legislature to consider that the new Constitution requires, without any unnecessary delay, the establishment of free schools," the statistical proof that illiteracy in Indiana "has increased more than one per cent., whilst the population has increased less than fifty per cent.," and "that such facts are significant that the schoolmaster is needed to be abroad in the Commonwealth." He then analyzes and classifies the resources to be depended on, states the cost of "a good and efficient system of free schools," and the parts that must be incorporated into the new system, as to supervision, township school committees, district superintendents, State superintendent, teachers' institutes, Normal schools, graded schools, school libraries, Board of Education, etc. The style and substance of the entire document are elevated, and are pervaded with an evident satisfaction in the result reached after so many years of labor. "In closing this sixth and last educational address, it is a matter of no slight satisfaction to perceive that the subject of this message and its humble predecessors has awakened an interest and secured a degree of the public attention that warrants the expectation of more intelligent legislation and efficient action in future. These efforts now brought to a close, feeble and imperfect as they may be—and they have been made under very unpropitious circumstances—I wish to be regarded by you, and my fellow citizens at large, as a free will offering to the cause of common school education, and as some faint expression of my desire for the elevation of the masses, the instruction of the youth of our State, and the highest welfare of the rising generation. As they were commenced with no sinister purpose to subserve, so they are now terminated with no aspirations for office. I shall deem myself richly rewarded if they may afford you any assistance in consummating the object contemplated, or have contributed in any humble degree to produce the change that has come over the public mind on the subject of popular education since the period of their first issue. I close with the greater satisfaction from the conviction that this subject will hereafter receive a due share of executive recommendation and legislative attention, and that it will become the duty of some one more competent to the task, more favorably situated, and duly authorized to present its claims and advocate its progress."

I trust this protracted commemoration of the important service rendered by Professor Mills to the cause of free schools in Indiana will be pardoned. The aim of his message was lofty, and the result magnificent. It has been my purpose to bring out distinctly enough of what he did to keep the name of Caleb Mills green in the annals of the public schools of Indiana. To state what he did will not detract in the least from what others did in the same great enterprise, whose services I have not had time to sketch. He and they together laid the founda-

"Forty-four Years Ago this Morning."

With these words President Tuttle, on the 3d of Dec., 1877, in commemoration of the founding of Wabash College in 1833, began a brief discourse in the college chapel, from which the following paragraphs are taken:

To us who are connected with this institution it is a fact of interest that we can still point out the spot consecrated by the deliberations of the convention of nine men on the 21st of November, 1832, resulting in the resolution to found this college; also the spot on which, two days afterwards, five of the nine knelt in prayer, whilst "in the midst of nature's unbroken loveliness" they dedicated the institution to God and man in the interests of Christian education.

On the 2d of November, 1833, the Rev. John Thomson, Secretary of the Board, inserted an advertisement in the newspapers at Crawfordsville, Lafayette, Greencastle, and Rockville, announcing that "the first session of the Crawfordsville High School will commence on the first Monday of December, and continue four months. Price of tuition, \$4.00 for the English Department and \$6.00 for the classical. Board for a considerable number can be had for \$4.00 per week." In the same advertisement, headed Crawfordsville High School, "the Board of Trustees inform the citizens of this place and the public generally that they have obtained a teacher from the East to take charge of the school. He (Mr. Caleb Mills of Dunbarton, N. H.) is now on his way and is expected here in a few days. He comes well recommended, and has with him a considerable number of books and other donations for the use of the school."

The journey, which we can now accomplish in less than two days, then required several weeks. After this tedious journey of several weeks he reached Crawfordsville about the middle of November, and soon began housekeeping in the little house still standing at the rear of Center Church. No doubt during the first two weeks he occasionally visited the building in which he was to teach. The town was then in its eleventh year, and was still closely hugged with the forests. He could not go from the town to the college without passing through woods in which the squirrels were hunted, and in which it is said that even then occasionally the deer and wild turkey were to be seen.

The building was not finished, and on Monday morning, just forty-four years ago this very morning, Prof. Mills went to that unpretending building on an errand, the results of which are not yet, as we trust, all reached. For a man of so much purpose, buoyancy, and conscience, there would be little sense of discouragement in the uninviting array of educational facilities before him. He there met Rev. James Thomson, the real originator and founder of the College.

At 9 o'clock that Monday morning Mr. Thomson offered the prayer and made an address. Then Prof. Mills enrolled twelve names, and Wabash College was in motion.

How much Wabash College owes to such christian women (as Mrs. Mills) cannot be told. Indeed, no true history of this institution can be written which does not name the wives of its early instructors and friends. Their names do not appear on the catalogues of the college, but they were even as the shower and sunlight, which do not appear in the yellow glories of the wheat-field and granary. These silent and modest forces as truly helped to produce shock and grain as the more obtrusive ox and plow and plowman. And so these noble christian women as truly helped to found and build and nurture the college in times of darkness and peril as did their husbands.

BERTHA VON MARENHOLTZ-BÜLOW

AND THE KINDERGARTEN.

MEMOIR.*

The Baroness von Marenholtz-Bülow, whose life work is inseparably associated with the dissemination of Froebel's system of child-culture in different countries, belongs to the Redum line of a princely family whose name appears in the time of Charles the Great. Her father, Baron Frederick von Bülow-Wendhausen, the owner of the fine estate of Küblingen in the Duchy of Brunswick, was president of the Ducal Chamber and member of the regency charged with the administration of affairs during the long minority of the Duke. Her mother was the imperial Countess von Wartensleben, of the Mark of Brandenburg.

The Baroness Bertha was born in Brunswick, March 15, 1816, the second of eight sisters. Not yet twenty years old, she was married to Baron v. Marenholtz, lord by primo-geniture of Gross-Schwulper and a member of the Privy Council in Brunswick, and afterwards Court Marshal in Hanover. By this marriage she had one son, whose education till his death at the age of twenty, with that of several children of her husband by a prior marriage, was superintended in all its details by the Baroness, who, in addition to the training which the best private teachers could impart to herself and her own sisters, had the higher educative advantage of practical work, by which her own thoughtful mind was always accustomed to the consideration of pedagogical problems. Her own reflections on what she read and did, and what she saw done by her teachers in her own and her father's family, were recorded by her in a book, and which she afterwards found were in singular accord with the principles and methods which Friedrich Froebel had worked out in his profounder study of child-nature and nurture.

When free to act for herself, the Baroness broke away from the brilliant but narrow circle of court life to which she was born, and without entering the field of social reform, as the avowed champion of certain ideas, she sought in every way to acquaint herself with

* We are indebted mainly for the facts of this Memoir to a pamphlet of 156 pages by Louis Walter, printed in Dresden in 1881 by Verlag von Alwin Huabe, with the title *Bertha v. Marenholtz Bülow in ihrer Bedeutung für das Werk of Fr. Froebel.*

the best methods of education; and in this spirit in the summer of 1849, while sojourning at the Baths of Liebenstein in Thuringia, introduced herself to Froebel, who had quite recently settled down on a small farm in the neighborhood of the Springs, and was training a class of young women to become Kindergartners. She has told the story of this interview and of their intercourse, which continued during that and her subsequent visits to the Baths, in her charming and instructive volume of "*Reminiscences*."^{*}

In these personal interviews she became thoroughly acquainted with the principle of the Kindergarten and its application, both to the actual development of young children, and in the training of young Kindergartners, by the great master himself. To these opportunities of educational study were added elaborate discussions of the philosophy and practice of the new education between its first expounder and Dr. Diesterweg, the acknowledged head of the Pestalozzian method in Germany, and several experienced men of scientific and practical ability, who were concerned with actual teaching, and with the administration of systems of public instruction, so admirably described by herself.*

With every advantage for reaching cultivated people which bright and solid mental endowments, improved by the best private teaching and select social experience, could give,—with a loving acceptance of the doctrine of human development, by rational methods applied to the earliest conscious action of the child by agencies which necessarily belong to the nurture period of the human being, and extend into school and self-activity, which the insight and experience of such born educators as Pestalozzi, Froebel, and Diesterweg have brought to a good degree of practical efficiency,—thus equipped by nature, study, and observation added to home experience, the Baroness von Marenholtz-Bulow has not only given to the world, and especially to her sex, a beautiful example of a broadly beneficent life-work, but the results of that personal work has already entered into the educational institutions and literature of nations, to an extent not yet recorded of any other woman in the annals of education. Of this, her personal services to the Froebelian Education in different countries, we shall speak elsewhere. We close this brief introduction to a fuller treatment of her own understanding of Froebel's idea of the Child, with a List of her Publications (see page 127, 128), made up from Mr. Walter's pamphlet.

^{*} *Reminiscences of Friedrich Froebel*. Translated by Mrs. Horace Mann, and published by Lee & Shepard, Boston, 1877, p. 369.

WILLIAM MIDDENDORFF AND THE KINDERGARTEN.

Compiled from Lange's and Diesterweg's Notices in *Pedagogisches Jahrbuch* for 1853.

MEMOIR.

WILLIAM MIDDENDORFF, who in all his working days was associated with Frederick Froebel, and whose name should not be divorced from his in any historical development of the Kindergarten, was born in Brechten on the 20th of September, 1793. He was the youngest child, and only son of six children born to a peasant family in Westphalia. The local surroundings and family occupations were rural, and his were all the inherited traditions of genii and other inspirations of such locality and homes.

These Genii brake the woodland paths
And speak the language of the trees ;
Startle the birds in their green shades,
And watch in meads the browsing kine.
They know where broods the little birds
That guard their fledglings till they fly ;
They brown themselves in sun and storm,
And know not human speech nor love.—*Thieme.*

The father had an intense desire that his darling son should be qualified by education to rise into a position of higher culture and influence than his own, and to this end should become a preacher. He soon had caught the brightness and sweetness of the natural scenery round him as he tended the flocks on the hills and followed or watched the kine as they browsed, or wended to and from their wickered sheds night and morning, and all things conspired to develope the poetical side of his nature. In his solitary musings on the impressions which streamed in through eye and ear, "presentments of a life of his own, and of the connection and union of all things" were his, and in this ideal he ever afterwards acted. The fields and the uplands and hill-tops were always full of enjoyment to himself, and themes for the instruction of others.

At the age of ten Middendorff attended the gymnasium of Dortmund, and resided in the family of his uncle, the father of Arnold Barop. A school comrade of that period writes: "He took rank before all others, and was a model to us all—somewhat formal in manner, and terribly orderly and conscientious." His uncle had destined him for the university of Jena, but his inward promptings (his demon) insisted on his going to Berlin, and go he did, and there listened to the teachings of Fichte, Neander, and Schleiermaeker, and ever after held them all, and especially the latter, in the deepest reverence.

In Berlin he was on very friendly terms with *Justinus Kerner*, and especially with *Gustav Schwab*. He was introduced by a countryman

to the Counsellor of War, Hoffmeister, the father of Froebel's first wife. In the Spring of 1813 he joined Lutzow's free corps in Dresden. While in service he became acquainted with Friederick Froebel and Heinrich Langethal—the former, “that strange owl, who goes his solitary way and reads something strange in stones and plants.” He was in military service for a year. Then he was discharged with a reversionary into the Iron Cross and the place of an officer in case he should be called upon again. When Napoleon came back from Elba, he offered himself again to the corps, but was sent back to his studies by the influence of others. He returned to Berlin and became private teacher in the family of a banker. Langethal was at the same time private teacher in the family of the brother. Friederick Froebel received an appointment to the Mineralogical Museum of Berlin; he was an assistant of the well-known mineralogist, *Weiss*. The friendly relation between the three men was a very intimate one. The plan of founding an educational institution had been discussed by them while in service. But on account of outside obstacles the thought still slumbered in their minds. Then Froebel suddenly vanished, as he had received a call to Stockholm as Professor of Mineralogy. His friends knew nothing of him for a long time. At last he wrote to them from Griesheim and asked them to come to him. Middendorff did this in 1817, against the wish and in spite of the weeping prayers of his parents, who at last, calming their feelings, dismissed him with these words: “Heaven has richly blessed us, one must be sacrificed to the Lord!” Langethal soon followed the example of his friend, and thus began the life drama at Keilhau, which, in its trials, had a closer resemblance to a tragedy than a comedy.

In 1826 Middendorff was married, and was blessed with seven children. His family life was simple and earnest, but cheerful. He exacted from all its members an unselfish devotion to the idea which the founders of the Universal German Educational Institution were striving to realize, and would tolerate nothing useless or self-indulgent, not even in the days and weeks of customary reckless recreation. To his wife he was always tender, frank, and considerate; and his children, with whom he was strict, but not harsh, he put into the path of free development, and they always regarded him with great filial piety and tender reverence. He was a friend and example of order and neatness; and diligent and earnest, even to overworking, in his efforts to realize in the institution the idea, or disseminate a knowledge of its principles.

He was intensely patriotic and national, and to the German Parliament of 1848, he dedicated his treatise “*The Kindergarten—the need of the present time*,” and when the scarcely risen sun set again, he did not lose courage and hope. “Come let us live with our children,” he cried so much the louder, with his friend Froebel, and when that friend departed this life, in 1852, he exclaimed, “Now I must be born!”

In the struggle precipitated by the Positivists, he declared himself

attached to that which, although unseen and spiritual, still was solid as the rock. "Faith sees the Infinite as the Being out of which everything that is, was, or will be, proceeds, even our own spirits. Faith is sensibility to the spirit of creation, and holds firmly and unchangeably to the Infinite, which is an immediate intuition, and manifests itself to the soul as the archetype of the true, the right, and the good. Those who would imprison the spirit of Christianity in crystalized forms are the worst sort of Positivists."

On the 26th of November, 1853, Middendorff stepped to the window to look out on the fields and woods, while a deep snow was falling—"Oh, how the snow enchants me!" and then returned to the group to which he was giving religious instruction, which having finished, he stepped again to the window and said: "See how nature lets everything apparently decay and fall, and seem to die; but it hides the new buds and the new life for the coming spring, only we cannot see them. So it is with human life." He then played cheerfully with the children, and spoke in his last instruction on the immortality of the soul, suggested by his last look on the outer world. He died in the night of a nervous spasm, and his eyes were closed forever.

Middendorff's motto was: *Be transparent, true, and faithful.*

SERVICES FOR KINDERGARTEN.

Middendorff's great service to the Froebel idea, was in his unselfish devotion of himself for life to its realization in practical methods, and the magnetic influence of his oral exposition of its principles in private, and occasionally in public. His few printed thoughts are not of much pedagogical value.

In 1848 Middendorff published his "*Thoughts on the Kindergarten*," which he dedicated to the German Parliament (to which many appeals had gone up from the people for the improvement of the schools and of educational institutions generally), and to the beloved children, "the budding hope of the people" to whom his whole life has been devoted.

To the inquiry "Why must the Kindergarten be?" Middendorff shows that parents generally have neither the knowledge or the leisure to look after the early development of the child's physical and mental faculties, and which will grow in some direction in spite of the indifference, ignorance, or perversity of parents or nurses. Intelligent parents gladly welcome the trained kindergartner.

To the inquiry, "How is a Kindergarten carried on," the author describes briefly the whole process of child culture from the baby play and song to the later occupations and the Christmas festival.

To the inquiry, "What does the Kindergarten effect in the Child?" Middendorff appeals to parents to come and see the real development of the whole being. Seeing is here—believing.

In the last division of his little treatise, the author unfolds the necessity and ways of meeting the higher and deeper social and moral wants of

the poorer classes of society, in the right beginnings of child culture which the Kindergarten offers in its plays and occupations.

First Beginning in Hamburg.

Out of the stirring year, 1848, issued numerous projects of social and national reform, in some of which German women participated, particularly in the commercial city of Hamburg. Among other forms of this activity was the German Catholic Congregation, to which George Weigert was attached as the religious teacher. This society had turned its attention to Friederich Froebel, who had, in various ways, appealed to women as the true educators of the race, whose mission it was to clear the path for their own emancipation, and the elevation of humanity by a new education which should take hold of the child in the cradle and in the age of impressions when impressions are deepest and most lasting. To Froebel an invitation was extended to spend six months in Hamburg to give lectures, found Kindergartens, and train suitable persons to conduct the same.

In some complication of affairs growing out of the engagement with Carl Froebel, to establish a Girl's High School in Hamburg, Middendorff became personally known to the committee charged with that movement, and on the occasion of a visit to his daughter, in September, 1849, was invited to address the Woman's Union, to which known friends, doubters, and opposers of the new education were invited. When he closed his address all present were fused by his fervid eloquence, and—borne on the stream of his flowing narrative of work done at Keilhau, and clear statement of principles and glowing anticipations of good from the general and earnest enlistment of women in the work of their own emancipation, the ennobling of the family state, and the elevation of humanity—were united in a common feeling and purpose. On the evening of the 23d following Middendorff spoke again for two hours on the same themes to a numerous audience, with the same results, and when Froebel came, the way was open for him to begin his work.

If the immediate results in founding Kindergartens were not as marked as was anticipated by some of the original movers, this may be attributed partly to the absorption of a portion of the interest awakened by Middendorff which was personal to himself, by the Girl's High School movement; and partly to the delays in the growth of any institution, which depends on the coöperation of many independent agencies acting from different standpoints, and to the conflicting claims of other interests. One thing is certain, out of this purely accidental but always identically harmonious aimed labor of the two friends, the Kindergarten work was begun in Hamburg, and out of that beginning in 1849 has flowed a mighty stream of influence which has disseminated the Froebel idea to many countries.

CHARACTERISTIC TRAITS. BY DR. DIESTERWEG.

The loved and lost we see no more,
But their glorious light we see,
Shining from the other shore.

With these words of Goethe* I introduce the following tribute to the characteristic traits of William Middendorff. Whoever knew him will not soon forget him; whoever came into his sphere was illuminated by the warmth and light which radiated from him; from many the benign influence has not yet passed away. To speak figuratively, he was a star that gratefully absorbed into itself the light of other stars; but he shone also with his own radiance.

A monument to Friedrich Froebel has been placed upon his grave, on the hill above Marienthal, in the beautiful church-yard that stands over the little city of Schweina, where the view of the castle of Altenstein and the ruins of Liebenstein enchants the traveler. The monument represents the cube, cylinder, and ball, the ground symbol of Froebel's intuition—and is hewn out of sandstone. A perishable monument! still it was excellently devised by Middendorff. But what need have men of the inner being of outward tokens of honor during their life time, or outward monuments after their death? Monuments are erected to the heroes of war; these men have made themselves an imperishable monument—if anything is imperishable in this world—in the hearts of men. The divine discovery of Johann Guttenberg offers itself as a fitting means of relating to their contemporaries and successors the life of these noble friends of men. These words have this aim. May they find a receptive ear and heart!

As, according to Niebuhr's remarks, at the death of an honorable man in old Rome, there was not a sorrowful voice, but all took pains to honor his memory and to make known to a wide circle his services to his country and to life, together with his other virtues, so we, late minstrels of the dead (Epigoni), will do with our dead. An honorable remembrance is all we have to offer them. If further we are excited to emulate them, their influence extends beyond the limits of their immediate activity. I have nothing to say of Middendorff but what is good and noble. Indifferent readers might suspect that I am covering up or concealing weaknesses, exaggerating virtues, and, instead of giving historical traits, delivering a panegyric. It is not so; the truth is everything with me, but I have perceived nothing blameworthy in Middendorff. I do not think it useful to create

*Was vergangen, kehrt nicht wieder;
Doch was leuchtend ging hernieder,
Leuchtet lange noch zurück.—*Gothe.*

Diesterweg's *Pädagogisches Jahrbuch* for 1853.

beings of ideal perfection at the expense of truth; but it would be still more objectionable to hunt up weaknesses, if they did not present themselves. Of Middendorff it may truly be said, "He was a man whose steps may be followed, but whose place no man can fill."

Lange, in his representation, does not disclaim the sentiment of a son-in-law, or daughter's husband, but far from falling into the rhetorical tone of the flatterer, he speaks only the language of a grateful son and of just veneration for a man who was not only his father, but his friend and teacher. Indeed, I am sure that he is so careful not to excite the opinion that he has said too much, that he holds back some information which I, who was not connected with Middendorff by the ties of relationship, but only (only, do I say?) of spiritual friendship, have undertaken to add. I speak, of course, not in the name of another, but in my own name.

But before I proceed I must, for the right estimate of the standpoint which I take in such a representation of another's life, repeat a saying of Wieland's, which he puts into the mouth of Diogenes of Synope: "A small mind perceives, in the narrow circle which he describes with his nose, the smallest notes. Hence the readiness with which Lilliputian minds are so much too active in perceiving little spots or little faults, while they are incapable of being touched by the beauty of a whole character. They do not consider that this sharp-sightedness for trifles is nothing but a childish trait, and that through their own inability to take in a whole and judge it correctly, they lack one of the most essential advantages by which a man may be discriminated from a creature in leading-strings."

Unquestionably Froebel and Middendorff were both interesting men and belonged to this category. Both friends, whose friendship began in Lützow's free corps and lasted through life, were pupils, esteemed disciples of Pestalozzi; Froebel was his immediate pupil: "The disciple is not above the master," but the disciple works in the spirit of the master, else he does not deserve that title of honor. Rich is the creative power of the master of the world, but yet it seems, at times, that this power—ceases to act, who could think that!—manifests itself in other ways. Thus the spirit of Pestalozzi seems to vanish. Perhaps the men named were the last of his true pupils. That would be a matter of regret, for the spirit of Pestalozzi was the spirit of true ideality, and yet (or was it just for that reason) the spirit of true love for the people, the lowly-born and the poor; the spirit of true pedagogy. We have, as teachers, the same right as other professions. Therefore, in modesty, we call the last century pedagogically the century of Pestalozzi, just as men in general speak of the century of Alex-

ander, of Charles the Great, of Frederick II. With Pestalozzi, our two friends shared a similar fate, poverty and misunderstanding. Like him, they fought all their lives with the want of sufficient means; and their purest purposes were not spared mistrust and contempt. Whoever is desirous of material treasures must not choose the path of the teacher, who verifies the proverb uttered three thousand years ago, "Whoever will teach much, must suffer much." The pedagogue must not expect to see outward results, but so much more is it our duty to acknowledge what the true pedagogue has done, to support him with all our power, and be true to his memory in our hearts. Good men often shake off the grateful memory of men to whom they owe their knowledge and insight.

In the spring of 1849 I met with Froebel; in the autumn of the same year with Middendorff. The meeting with these two closely-united friends I look upon as the last happy event of my teaching life. Like the dew-drops, in every one of which the corporeal eye of creation, the sun, mirrors itself, but each in its own way: so the spirit of true pedagogy mirrored itself in those men, characteristically in each (which is a token of their truth to nature).

I have spoken of Froebel in the "Pedagogic year-book for 1851," and often in the "*Rhein. Blätter*;" but one cannot speak of Middendorff without speaking of Froebel; they belong together. But here Middendorff stands in the foreground.

What I have to say of him I write with renewed deep sorrow over the unexpected loss of that *man*, I say, although the word is not satisfactory; but alas! I know of no word that will distinctly express the nature of Middendorff's being. There is no word, as there are no symbols for a richly-endowed nature, a manifoldly-cultivated personality, for a uniform combination of rare excellences. These peculiarities present themselves to every one who knew Middendorff. I shall be accused of extravagance in what I shall say further of him, but it cannot be helped. I must rather add that my words do not satisfy me; the impression I carry away of him is not to be represented in words, so I do not think of trying for any; I write unsatisfactory, cold words of the man in whom has appeared to me thus far the noblest, most rounded personality that I have had the happiness of beholding. Middendorff was a God-like man.

If one wishes to praise a *teacher*, one ascribes these and those qualities to him, and rejoices in them; and if one is praising a *man*, one will say that he is sincere and true, upright and without blemish, friendly and grateful, and worthy of recognition, but, thank God, not of uncommon virtue; but these and those qualities do not reach

Middendorff. He stood outside the limits of every thing common. He moved like an ordinary man among ordinary men; there was nothing peculiar in his manners, but what and how he was was a thing of the rarest kind. Of the men I have known in life I can place no one by the side of him in respect to the oneness and individually-personal perfection of his nature. Whoever reads this will think of Friedrich Froebel, and will perhaps remember what I have said of him. I remember how Middendorff looked up to him as already far superior to himself, and it is true he was more rich in invention, more creative, more full of genius, than Middendorff; but in respect to the oneness of the whole being, to visible, palpable, obvious ingenuousness and devotion, and purity of heart and soul, I place no one over—I place no one near Middendorff.

He is gone, he is lost to us; and therefore I can speak of him, What would the man say, if here, in his—what shall I say? in his innocence, in his simplicity, in his maiden modesty, if he should know that any one spoke of him thus? He would glow with anger. as I have seen him do, but the capacity for that I look upon in him as a high one; he was a child, and again no child; a child in innocence and purity of heart, but also a man, and at the right time a most commanding and powerful man. But I cannot go on thus; I must control myself; I must relate individual traits.

There is a science of physiognomy; one can recognize the essential nature of a man in the build of his body, in his walk, his attitudes, in the shape of his head, in his mien—I mean the incommunicable, direct conception of the most profound and peculiar quality of a man. The capacity for it is peculiar only to men of simple and sincere nature; only in a pure mirror can be seen a true picture of objects. So-called connoisseurs of men, the worldly-wise men, are far removed from it. They deceive themselves in all the routine of which they boast; they have no touchstone for simple, grand natures.

By such natures we can test, exalt, and strengthen the degree which we have had the happiness to possess of this touchstone of character. Middendorff was peculiarly fitted for this. His appearance wholly and purely proclaimed his nature, the very essence of the man. Other men, too, have an expression of spirituality and sensibility in their countenances. Middendorff's face was transfigured. In his eye there lay something which it is difficult to describe; it can only be indicated when I say there was something supernatural in it. In his daughter's eye it is found again. If one should say a large, beaming eye, of spiritual yet mild brilliancy, expressive of greatness of soul, showing love, devotion, friendship, and trust, all

that is true of him, but still it does not indicate the peculiar quality. We come nearer to it if we remember a wide-open pupil yielding itself to a pure conception of the world, and of men—who has seen it otherwise—when he thinks of and portrays to himself the spirituality of expression in pictures of prophets and seers, as—to mention no higher example—Socrates must have looked when he received communications from his demon.

That Middendorff, like every man penetrated with deep sensibility to the inner meaning of things, and to the understanding of himself and the recognition of the duties of life obligatory upon him, had his demon, and received communications from it and followed its warnings, was certain. Lange has expressed it already. It was seen in the mirror of his eye; the intrinsic tone of his voice proclaimed it to every one who had the ear for it; the confessions which his intimate friends received from him in confidential conversation confirmed it (his voice then took a peculiar elevated tone, and yet a lower key); and this peculiarity of the man drew children to him with an indescribable charm, and fettered them to his side.

He was, like Salzmann, certain of the immediate guiding of a power, not incompatible with freedom, swaying the fate of the world at large and the affairs of individual men, and this inward assurance, confirmed by the whole course of his life and experience, gave him, when he became aware of it, what was expected of him in emergencies, self-command, self-conquest, and self-sacrifice, of which latter he was capable in the highest degree, as Lange gives us proof. Among a thousand men, how many are there who can conceive of a man, destitute of favorable circumstances, working for years in a remote region, resolved upon a kind of vagabond life, subjected to privations of all kinds, and in spite of all this, and of misconception and unkind judgments, greeting every day's work joyfully? So felt, thought, and acted Middendorff.

He lived in the world among men as they are, but he did not belong to the world; he scarcely knew it; yet he was a man who understood human existence, the inmost soul of the whole race and of individuals, as few do. It was possible to overlook him, but whoever once knew him could never forget him. It is conceivable also because of that quality which can be designated as deep inwardness of mind and sensibility, that he was specially attracted by little children and by womanly natures, and also attracted them. Compared with men he had a soft, tender, womanly nature. The impression he made immediately was such that one felt it to be impossible in his presence to undertake or to say anything coarse and

uncouth, impure or vulgar. His mere presence ennobled and brought out the best in every one. In spite of this purity and loftiness, no one felt oppressed or constrained, but freed and exalted.

And in spite of this effect of the nature born with him, he was a man, a whole man, adorned with all manly attributes, with delight in all that was powerful and virtuous, with energy of character and with the strongest feelings, full of earnestness and anger against every thing mean and unworthy. Endowed with the deepest sensibility, he was anything but what is usually called in these effeminate times, in the favorite sense of the word, a "charming man." He was much too conscientious and earnest for that, and the lofty, inspiring idea of his life left no room for weak sentimentality. He made the most earnest demands of those around him as well as of himself. A man was put into that tenderly-built body; he had steeled himself early, he had fought at twenty in Lützow's corps, and I learned to know him in the last five years as a robust mountain-traveler in the Thuringian forests. He knew nothing of what men think belongs to advanced years, or what self-indulgence means.

This man had to be seen among the girls or young ladies who were in Froebel's institute at Marienthal, near Liebenstein, which he carried on after Froebel's death; had to be seen in the kindergarten at Liebenstein, to form a conception of the attachment not only of the young ladies, but of the smallest children for him. Froebel surpassed him in the conceptions of his genius, but he surpassed Froebel in clearness and direct fruitfulness of representation. The purity of mind, the enthusiasm for the idea which had captivated them, their magic powers over receptive feelings, they shared in common. Two hearts and one thought, two souls and one feeling, Orestes and Pylades, Castor and Pollux, Damon and Pythias, Froebel and Middendorff! Froebel knew what he had in Middendorff, and Middendorff, when old, still looked with wondering eyes up to Froebel. Both were united by their ideal of education, both were nourished and greatly attracted by the spirit of Pestalozzi, whom they honored as long as they lived, without losing their own individuality.

The world of to-day has lost the power of comprehending this. The leaders and guides of pedagogy have missed it all or they have never learnt to know it. They have had no idea of its existence or its possibility, and the endless majority of teachers know nothing of it. We ask, with the deepest pain, where has the enthusiasm for youth and the public weal gone? Is there not discontent, despondency, mediocrity, in its place? Does anything else proceed from those who consider themselves the reformers of the time, and declare themselves such, but wordy exhortations for a faith that does

not rouse the spiritual powers of man, but paralyzes them? And do they not seek for the salvation of the teachers and their pupils in stupefying morning and evening devotions, in liturgies and songs, and in other measures for the limiting of knowledge and ability?

How it is amongst the teachers of the present time, as to the enthusiasm, the aspiring, cheerful feeling, the inner enjoyment of their calling, which without these is a badly-rewarded, hireling service; how it is as to the pleasure with which they once looked forward to the teachers' conventions: he knows who can compare past times and the present. He also knows what spirit predominated among the young people who devoted themselves to the teachers' calling in the institutions which were animated by the youth-restoring Pestalozzian spirit; and what is it now? The whole world knows that men of the purest enthusiasm, of the noblest strivings, of the highest capacity of self-sacrifice—that Friedrich Froebel, and all who adhered to him, especially Middendorff, were suspected of communism, of socialism, of atheism and free-thinking!

Was Middendorff also a Christian?

I hold it to be a disgrace, after such a man was found by experience to be what he was, that such a question should arise. It proceeds from those who seek for the essence of Christianity in externals, and who never have shared its spirit. Such low fellows, who now have an opportunity to show themselves off, but who are an abomination to the more profound and modest men who dislike to cast the pearls of their souls before swine and to boast of their faith,—deserve no answer. It has, therefore, struck me unpleasantly that even Lange notices the question and answers it. I know very well whence the impulse came; it lies very near; but in spite of that we must not gratify the men of words and show, by recognizing the title to such a questioning. For what but vanity, spiritual pride, spite for the popularity of their superiors, what else but absorption in palpable externals and immeasurable arrogance in spite of their humble words, lies at the bottom of it?

Middendorff a Christian? That St. John's-soul a Christian? Thus ask those who presume to measure with their wooden rule the infinite diversity of minds? Would these men, who think themselves alone good and pious—(the question is allowable in view of the well-known deeds of our day), would they have found Christ himself correct according to their system? Hardly; he was in his time declared by the scribes and creed-followers to be an adversary and a heretic. A feeling seizes me of mixed disgust and abhorrence when I think that such presumption even enters into the teachers' institutes, where it is looked upon as faith well pleasing to God, and is filtered into the

young teachers. A dark, mournful spirit rests upon the schools. A fearful mistrust spreads over the teachers; fear arises when a hundred or fifty of them meet together without superintendence; they have ceased "to believe in love and faith"; even a Middendorff could not escape their suspicion, that pure, white human soul, in which, with a microscope, no trace of falsehood and deception could be discovered, who fought in youth for German life, German freedom and unity, and devoted his whole existence to the development and education of German youth!

What could this man as well as Froebel not have done for the creation of the most intrinsic devotion and love to our children, those rarest qualities in teachers, and of the equally rare knowledge of children, so peculiar to them, if the powers and qualities of these men, who do not return to us—for when will another Pestalozzian time come?—if they had been used in suitable places? In vain they made life-long exertions to find a quite suitable and permanent asylum and sufficient means for their object, which was a pedagogic, central point, unifying and acting in all directions; they tried in foreign lands, and even there did not find the right place; the time was past when thousands flocked to Basedow, and a noble prince received him; "faith in love and truth" had vanished, and even the hope of seeing a living central institution for the intellectual culture of the nation blooming out at Weimar in Goethe's centennial jubilee, proved to be a delusion. They laughed at and derided our plan in Berlin as well as in Weimar, and what have they now reached? One statue more instead of a living institution, an increase of the dead treasures of their closed museum, instead of a factor taking hold of the present time. Froebel mourned over it on his death-bed, and Middendorff was grieved.

I pass over a great deal, and mention but one thing more. Middendorff was no writer; writing was disagreeable to him; the rush of his thoughts hindered a systematic arrangement of them; yet he wrote as he could not help doing, intellectually and subjectively; but his greatest power was not in that, it was shown in the living word; he was an orator. He showed that in Hamburg, in Liebenstein, and in Salzungen. In the autumn of 1850 the friends of Froebel held a meeting in the Liebenstein 'Kurhause,' at the well-known 'Erdfalle.' On the second day was the exhibition of the fruits of the efforts made for little children in the spirit of Froebel. The teachers told this, the kindergartners that. At last came Middendorff, who told what he had observed in the children of the peasantry and their mothers in the region around Keilhau, which he was in the habit of visiting on Sundays. It went home to all hearts.

And how he spoke in May, 1853, at Salzungen, at the fifth General Assembly of German teachers! I do not deny that there as well as here I trembled with joyful exultation. This extraordinary effect of the appearance of Middendorff I ascribe essentially to his sincerity. Everything was in harmony in him, bodily as well as spiritually. One always knew where to find him. A true, beautiful, beneficent image of him is left to his friends. He stands before their recollection in the perfected harmony of his being. In a man of this kind one cannot ask after this or that peculiarity, whether he possessed this or that quality; that would be impertinent.

He was not this or that; he did not make himself this or that; he was a unit, and therefore he was everything that he had the capacity of being. The pygmies and Lilliputians of the pedagogues of to-day wish to produce this and that; they wish to make everything, to *make*, that is to pervert and train, but they produce nothing, because they will not let nature, which is God-given, exist or grow. How far removed wert thou, noble friend, from this old-new "wisdom!" Who of those present at the Liebenstein meeting will not remember how he dealt with the man who wanted to subordinate everything to the model of "Christian orthodoxy," and was not willing to recognize the right of each individual to his own natural development.

He, the single-minded, harmoniously-cultivated, perfect man of his kind, felt, as others did, a detestation of the thought of what must yet become of the world which he found so glorious and beautiful in the manifoldness of its manifestations, if the priests of all sects should succeed, like shepherds, in casting the net of their faith, as the only saving one, over the heads of their flocks! At this idea a terror seized the pure soul which knew so well what it owed to a natural, free development. How this man clung to nature, how he worshiped the hand of the Creator, when he dwelt upon the laws of man's nature! His soul soared into God's free heaven, where he felt at home; there he was nearer to his God, there he understood the decrees of his genius. It moves me when I think of the expression of his face, the glory of his eyes, and the tone of his voice, as he poured out his inmost soul upon the top of the island mountain! He was convinced of the immortal existence of the human soul, and of its progressive development as the source of blessedness.

Where does that pure, transfigured human soul linger now? To see and enjoy thee again, released from earthly tribulations, would alone be a heaven, an unspeakable rapture!

Have pia anima, anima candida,
Never-to-be-forgotten friend!

It was by such hearty characterizations as this of Middendorff, and his earlier notices of Froebel and the Kindergarten in the *Rheinische Blätter*, and *Pädagogisches Jahrbuch*, as soon as he became thoroughly acquainted with them, that Diesterweg rendered such essential service to the New Education. Until its principles and methods, its founder and co-laborers were recognized by Diesterweg, the ablest champion of a broad liberal elementary education for the whole people, and whose voice was potential in spite of the disfavor of the court, the Kindergarten had not arrested the attention of pedagogical circles in Germany. Diesterweg, though late in the field, was the first to proclaim the full significance of play, Froebel's addition to pedagogical science, as the firm foundation in the child's earliest instruction, for his own Prussian-Pestalozzian system of intuitional teaching.* The Baroness Marenholtz Bülow, in all her great and varied and ubiquitous service to the Froebelian cause, never did a better day's work than when she persuaded the great master, in spite of his prejudices "against all fooling in educational matters," to go and listen and see what Froebel had to say and do, on the 15th of July, 1840, in his little modest farm house in Liebenstein. He went, was charmed, and was satisfied that Froebel "had actually something of a seer and looked into the inmost nature of the child as no one else had done." From that day he went every day for weeks afterwards, with the "Mother and Cosset Songs" under his arm, to learn more of the Kindergarten and converse with Froebel.

Both Diesterweg and Froebel were pupils of Pestalozzi, and both found, in the instinctive activity of the child, the impulse and method of mental development; but Froebel was the first to formulate these methods in the Nursery and Kindergarten for the full development of the entire human being, and furnish the basis of the intuitional instruction which Pestalozzi was the first to discover, and Diesterweg and other Directors of Teachers' Seminaries to develop into a system of elementary education for the people.

The Prussian-Pestalozzian system of elementary instruction, as described by Stowe, Bache and Mann, before the restrictions of the "Regulativ" of 1854 were applied to the curriculum and methods of the Primary Teachers' Seminaries, was the creation of such Directors of Seminaries as Harnisch, Diesterweg, and others of the Pestalozzian school.

In the original issue of the *Wegweiser* we find no special recognition of the Kindergarten. In the latest edition, there is a very valuable paper on both Froebel and the Kindergarten by Ferdinand Winthurf.

* For the contents of this model Guide for German teachers, see Barnard's Journal of Education, vol. vii, p. 312. In the same connection will be found a brief memoir of this great teacher and popular educator. Diesterweg's chapter in edition of 1854, on Intuitional and Speaking Exercises, as published in same Journal (Vol. xii, p. 411-430), and Dr. Buse's article in edition of 1876, republished in Vol. xxx, p. 417-450, are in the true spirit and method of Froebel applied to children after leaving the Kindergarten.

† This paper will be found in Barnard's Journal xxxi, p. 89-90.

FEMALE EDUCATION IN CONNECTICUT.

LETTER FROM W. C. FOWLER, LL.D.

PERIOD BEFORE 1800.

DEAR DR. BARNARD: To your inquiries respecting female education in ancient Connecticut, I beg to present the following reply:*

In the light of history, a glance at the races and tribes of men on the face of the earth is sufficient to show that the early education of women has generally been conformed to the ideas entertained of her expected duties as a wife and a mother. This is true in the lower and in the higher degrees of civilization; in the kraals of the Hottentots, the wigwams of the American Indians, in the Zenânas of Hindoostan, as well as in the homes of Christian nations.

In the high Christian civilization of Connecticut, the expected duties of woman, as a wife and a mother, were enlarged in proportion to the high sphere in which she was called to act as a denizen of time and a future inhabitant of eternity. She was expected to be a true yoke-fellow of her husband, that he might, in the language of the Bible, "be won by her conversation." She was expected to train up her children in the nurture and admonition of the Lord, as fellow-heirs of the grace of life.

Thus acting, these children could not fail to think of her as the busy housewife who plied her incessant cares, or as the queen, issuing her commands, and making order and neatness reign in her domain, and as one from whose heart the spring of sympathy welled up to her eyes in tears, as joy or sorrow ruled the hour. And after she had gone to her home in the heavens, they could think of her as one who, when on earth, had been a ministering spirit for them who were not, as well as for them who were, heirs of salvation. Thus to the families of ancient Connecticut the Gospel of Christ opened a long vista from this into the eternal world, and presented the future inhabitants of that world, clad in the white robes of the saints, walking by the river of life, and plucking the fruits from the trees that grow on both sides of the river.

If any Connecticut parents were asked the question, "Whom shall he teach knowledge, and whom shall he make to understand doctrine?" the answer forthcoming would be, "them that are weaned from the milk and drawn from the breasts." "For precept must be upon precept, precept upon precept; line upon line, line upon line; here a little and there a little." In other words, parents must teach their children, while they are still young, with constant assiduity.

*As printed, several additional items are incorporated by the Editor with the consent of the writer.

And knowing that actions speak louder and more distinctly than words, they were careful to illustrate their instructions by examples. God, the great Teacher of the Universe, instructs His creatures by His works and His words; and many judicious and pious parents in Connecticut taught their children, not only by their sayings, but by their doings.

The early settlers of Connecticut brought with them from England a pronounced appreciation of both the higher and lower literary education of the young. They regarded the Universities of Oxford and Cambridge in the mother country, as the "two eyes" of England. They aided Harvard College for something like sixty years after its foundation, sending to it from time to time young men to be educated, and wheat to sustain the College. They or their successors established Yale College, in the hope that those who were graduated at this institution would be eyes to the blind in the commonwealth and New England. They established primary or common schools at an early period, for the universal attendance of children and youth, and they transmitted to their posterity their attachment to both the higher and lower institutions of learning. What the village schoolmaster and his school in England were, may be partly known from Goldsmith's "Deserted Village"; and what were the schoolmistress in England and her school, may be partly known from Shenstone's poem, entitled "The Schoolmistress."

The common school system in Connecticut was intended from the first to be a general provision for teaching all the children, male and female, to read the Bible. The answer to the first question in the Westminster Catechism is, that "the chief end of man is to glorify God and enjoy Him forever." The answer to the second question is, that "The word of God which is contained in the Scriptures of the Old and New Testament is the only rule to direct us how we may glorify God and enjoy Him." These two answers form the premises to the conclusion that every child ought to be taught to read the word of God in the Old and New Testaments.

There was also the additional reason that every one ought to be able to read the laws of the commonwealth in which he lived, especially if he was a voter.

From the first establishment of common schools in this State, boys and girls were sent to them for instruction in the rudiments of learning. This was in accordance with the practice in England and Scotland. Where the parents had leisure and intelligence, they frequently taught their children to read words of one or two syllables before sending them to school. This they considered a part of home education.

The word "education" is sometimes used in a limited sense, as equivalent to the word "instruction." It is also used in a broader sense, as signifying all those influences, whether designed or undesigned, which contribute to the formation of character. There was also another way in which provision was made for the education of children and youth

of both sexes in the family or the school. There was, at that time, a great system of apprenticeship, borrowed from England, prevailing in this and other States, in which children and youth were bound out to service by their parents, by the selectmen, or otherwise, until the age of twenty-one for males, and eighteen for females. According to the articles of indenture, the minors thus bound out were to receive instruction in certain branches of knowledge, and a small outfit, including the Bible, when they were of age. This outfit was sometimes enlarged by good masters beyond the conditions of the contract, when the servants did well, and it sometimes happened that the female servants did so well that they made connections in life fully equalling those of their master's daughters. Allusion is made to this in the well-known distich—

"Him portioned maids, apprenticed orphans blessed,
The young who labor, and the old who rest."

Allusion is also made to this system in the Constitution of the United States. It was a self-supporting, beneficent system, in which one ounce of prevention in the family and district schools was worth a pound of cure in the reform schools of the present day.

The father, when about to die, instead of leaving his unwary and impulsive son "Lord of himself, that heritage of woe," during his minority, could place him at service, under a strong but easy yoke, like a child at home, until he could be able to see and shape his own destiny as an independent housekeeper.

The mother, instead of leaving her daughter during her minority, as a waif, to be picked up and cast off, could place her in a good family, where she could grow up as a flower in a fair garden, ready to be transplanted in due time to the garden of her husband.

The girls continued in the district schools a longer or shorter period, according to the exigencies of the parents or masters.

Besides these common schools, in those days the ministers of churches often had private schools in their houses, during some portion of the year, in which their own children, if they had any, and the children of their parishioners, were instructed in some of the higher branches of knowledge. Many girls derived great advantage from breathing the literary atmosphere of these parish schools, as they might be called. Standing on this higher ground, their views became more enlarged, and their feelings more elevated through the whole of their lives.

Many of the ministers of Connecticut fitted students for College, and in some instances girls studied Latin and Greek so successfully under their instruction, that they were fully prepared to enter Yale College.

Examples of Educated Women and Educating Mothers.

Joanna, daughter of Bryan Rossiter, physician, of Guilford, Connecticut, was highly educated; born July, 1642; married Nov. 7, 1660, Rev. John Cotton of Plymouth, Mass., and had ten children, six of whom lived to occupy places of respectability. Rev. Josiah Cotton, in a history of the Cotton family, cited in Sibley's *Graduates of Harvard College*, writes of his mother:

"She was a woman, not of ceremony but of substance, of great knowledge, uncommon wisdom and discretion, and a notable faculty of speaking and writing. She understood something of Latin and poetry, had a good insight in the medicinal art, in the practice of which she was much impressed, and became very useful and helpful in the town. She ruled her children and servants well, very careful to set good examples, keeping up family duties in my father's absence, and managed secular affairs, most of which passed through her hands, with singular prudence and industry, and finally, she was a good wife, a good mistress, a good neighbor, and a good Christian."

Rev. Edward Taylor was born in Coventry, Eng., in 1642, graduated at Harvard College in 1671, went to Westfield, Mass., Dec. 8, 1671, died 1728-9. His first wife was Elizabeth, daughter of Rev. James Fitch, and granddaughter of Rev. Henry Whitfield of Guilford. By her he had eight children. His second wife was Ruth, daughter of Samuel Wyllis of Hartford. By her he had six children. The five daughters of the second wife were all married to clergymen in Connecticut.

Miss Lucinda Foote was the eldest daughter of the Rev. John Foote, Y. C. 1765, who was the pastor of the Congregational Church in Cheshire for about fifty years. She was one of ten children. Three of the sons were fitted for College by their father, she studying with them. The following is a certificate of President Stiles, as to her qualifications for Yale College. It is written in the Latin language.

"*The President of Yale College.*"

"*To all to whom these presents shall come, GREETING.*"

"Be it known to you that I have examined Miss Lucinda Foote—twelve years old—and have found that in the learned languages, the Latin and the Greek, she has made commendable progress, giving the true meaning of passages in the *Aeneid* of Virgil, the select orations of Cicero, and in the Greek Testament, and that she is fully qualified, except in regard to sex, to be received as a pupil of the Freshman Class in Yale University.

"Given in the College Library the 22d of December, 1783.

"EZRA STILES, *President.*"

She pursued a full course of college studies, and also studied the Hebrew with Pres. Stiles, subsequent to the date of this certificate. Miss Foote was born in Cheshire, May 19, 1772, was a sister of Gov. Samuel A. Foote, and married, July 29, 1790, Dr. Thomas S. Cornwall of Cheshire, who was a practicing physician in Cheshire for more than fifty years. She was the mother of ten children, one of whom, Mr. Edward A. Cornwall, the only survivor, furnished me with this information. She died in Cheshire, Aug. 23, 1834.

* *Præces Collegii Yalensis Omnibus, S. P. D.*

Nobis Notum sit, quod Dominam Lucindam Foote, ætat. 12. Examine probavi, eamque in Linguis edvetis, Latinâ et Græcâ laudabilem Progressum fuisse; eo ut familiariter et reddidisse et tractasse reperier; tum verba tum sententiæ alibi in *Aeneide* Virgillii, in *Selectis* Ciceronis *Orationibus*, et in *Graeco Testamento*, Testorque omnino illam, nisi pro Sexûs ratione, idoneam, ut in *Classem Recentium* in *Universitate Yalensis* Alumnæ admitteretur. Datum è Bibliothecâ Coll. Yal. 22 die Decemb. Anno Salutes MDCCLXXXIII.

EZRA STILES, *Præces*

Sarah Worthington Goodrich, eldest daughter of Rev. Samuel Goodrich, Y. C., 1788, was partly educated in the family of Rev. Daniel Smith of Stamford, who married a cousin of her mother, and who fitted students for college. She was herself so well fitted under his tuition, that she cried when the other members of the class could enter College and she could not. She married Amos Cook, a graduate of Yale College in 1791, and for her second husband, Frederick Wolcott, a graduate of Yale College in 1786. She was the mother of six children.

Rev. Wm. Worthington of Saybrook, Yale College, 1716, had five daughters. His practice was, for a number of years, to keep four of the daughters in the study with him, while one was engaged in pursuing her domestic duties and education with her mother. In this way they all became very thoroughly educated in literature, as well as in domestic employments, and made the best of wives, the best of mothers, and the best of housekeepers.

The oldest, Mary, married Aaron Eliot, son of Rev. Jared Eliot. He was deacon, colonel, and physician in Killingworth, member of the General Assembly nine sessions. His wife, Mary, was the mother of eight children.

The second daughter, Elizabeth, married, 1st, Col. Samuel Gale, and 2d, Rev. Elnathan Chauncey, a graduate of Yale College in 1748. She was the mother of six children, one of whom was my mother, namely Catherine Chauncey.

The third daughter, Temperance, married, 1st, Dr. Moses Gale, 2d, Rev. Cotton Mather Smith. She was the mother of eight children, one of whom was John Cotton Smith, Governor of Connecticut.

The fourth daughter, Sarah, married Col. John Ely, a distinguished physician, and was the mother of seven children, one of whom, Worthington, was a graduate of Yale College in 1780, and another, John, was a member of Congress.

The fifth daughter, Mehitabel, married Michael Hopkins. When she was taken by him to his father's house, his mother was so much pleased with his choice, that in a letter addressed to a friend, after expressing her admiration of her son's newly married wife, she said,

"Grace was in her step, heaven in her eye,
And every gesture dignity and love."

She was the mother of four children, one of whom, George, was a distinguished publisher in New York, and Sylvia, a daughter, was, in her youth, a celebrated beauty.

It should be added that Elizabeth, the second daughter of Wm. Worthington, was sent to Boston for a year, to complete her education by intercourse with family friends and kindred in that town.

Timothy Edwards, Harvard College 1691, settled in East Windsor, 1694, where he was in the ministry sixty-three years, had one son and ten daughters, all of whom he fitted for College. For a period the son, who was afterwards the celebrated Jonathan Edwards, recited Latin to his elder sisters.

Esther, the eldest daughter, married Rev. Samuel Hopkins of West Springfield.

Elizabeth, the second daughter, married Col. Jabez Huntington of Windham.

Anne, the third daughter, married John Ellsworth of East Windsor.

Eunice, the sixth daughter, married Wm. Metcalf of Lebanon.

Hannah, the ninth daughter, married Seth Wetmore of Middletown.

Martha, the tenth daughter, married Rev. M. Tuttle of Granville, Mass.

"When his daughters were of the proper age, he sent them to Boston to finish their education. Both he and Mrs. Edwards were exemplars in their care of their religious instruction, and as the reward of their parental fidelity, were permitted to see the fruits of piety in them all during their youth."

Jonathan Edwards, the elder, and Sarah Pierpont, his wife, had great advantages in their early education, the one being the son of Rev. Timothy Edwards, and the other the daughter of Rev. James Pierpont of New Haven. They were well matched and true yoke-fellows, each helping the other in the education of their children, of whom they had eleven, ten growing up to maturity.

President Edwards "kept a watchful eye over his children, that he might admonish them of the first wrong step, and direct them in the right way. He took opportunities to converse with them in his study, singly and closely, about their soul's concerns, and to give them warning, exhortation, and direction, as he saw need. He took much pains to instruct them in the principles of religion, in which he made use of the *Assembly's Shorter Catechism*: not merely by taking care that they learned it by heart, but by leading them into an understanding of the doctrines therein taught; by asking them questions on each answer, and explaining it to them. His usual time to attend to this was on the evening before the Sabbath. And, as he believed that the Sabbath, or holy time, began at sun-set the evening before the day, he ordered his family to finish all their secular business by that time, or before; when all were called together, a psalm was sung and prayer made, as an introduction to the sanctification of the Sabbath." *Vol. 1, p. 46, Eng. Ed.*

"Mrs. Edwards was a good economist, managing her household affairs with discretion and diligence. She was very careful that nothing should be wasted and lost; and often, when she did anything to save a *small* matter, or directed her children to do so, or saw them *waste* anything, she would mention the words of our Saviour, '*that nothing be lost*,' which she said she often thought of as containing a maxim worth remembering; especially when considered as the reason why His disciples should gather up the fragments."

Their children were, Sarah, born Aug. 25, 1728; married Elihu Parsons of Northampton; died May 15, 1805, aged 76.

Jerusha, born April 26, 1730. Was betrothed to David Brainerd, the missionary, and died soon after him, Feb. 14, 1747.

Esther, born Feb. 13, 1732; married Rev. Aaron Burr, President of New Jersey College. Was mother of Aaron Burr, Vice-President of the United States. Died Feb. 7, 1758, aged 26.

Mary, born April 4, 1734; married Timothy Dwight of Northampton, and their son Timothy was President of Yale College. Died Feb. 7, 1807, aged 72.

Lucy, born Aug. 31, 1736; married Jahleel Woodbridge of Stockbridge; died October, 1786, aged 50.

Timothy, born July 25, 1738; married Rhoda Ogden of New Jersey; died at Stockbridge, 1813, aged 75.

Susannah, born June 20, 1740; married Eleazar Porter of Hadley; died 1803, aged 61.

Eunice, born May 9, 1743; married ——— Hunt of New Jersey, and Thomas Pollock of North Carolina; died in 1822, aged 79.

Jonathan, born May 20, 1745; married Mary Porter of Hadley, and Mercy Sabin of New Haven; died Aug. 1, 1801, aged 56.

Elizabeth, born May 6, 1747; died Jan. 1, 1763, aged 14.

Pierrepoint, born April 8, 1750; married Frances Ogden. Was Judge of U. S. District Court for Connecticut; died April 14, 1826, aged 76.

Rev. Joseph Fish of Stonington, Harvard College 1728, had two daughters, Mary and Rebecca, who were, according to Prof. Silliman, "carefully educated in the fear of God, and in all that was requisite to their becoming ladies of the highest intelligence and refinement. Both parents were anxious to give to their two daughters, who were their only surviving children, the best education attainable in those times. At home they were personally instructed by their father in the elements of knowledge, and by both parents they were carefully trained to industry, economy, self-government, filial duty and affection. They were carefully guarded from the contaminations of the world, and a high standard of moral purity and feminine delicacy was ever kept in view, while their manners were formed to the graceful proprieties of life by that politeness which is only the expression in word and action of feelings of real benevolence, taking a lovely and deferential form. Their studies and books, their domestic training in the duties of house-keeping, their needles and their pens, and the rites of hospitality and of personal and family religion filled their time, so that they were rarely without employment, and even casual idleness sometimes received a mild paternal rebuke."

"In Newport, under Mrs. Osborne, a celebrated teacher of young ladies of that day (whose interesting biography has been since published), both daughters enjoyed the advantages of superior instruction, and Mary Fish, the elder daughter, maintained an epistolary correspondence with her venerated friend during her long life.—*Life, &c.*

Mary Fenno, daughter of Ephraim Fenno, was born April 3, 1767: Her father, who resided in Middletown, placed her under the instruction of the Rev. Elizur Goodrich, D.D., of Durham, with whom she studied Latin and Greek, and is supposed to have been fitted by him

for Yale College, with other students. At times she would study her lessons in Middletown, and saddle and bridle her horse and ride over to Dr. Goodrich's to recite her lessons. She spoke both the Spanish and French languages. She married Henry Mansfield of New Haven, brother of the celebrated Col. Jared Mansfield, and was the mother of six children, one of whom was the distinguished Gen. Joseph K. F. Mansfield of the U. S. A., killed at Antietam. "She was the best educated lady in Middletown, and probably in the State. She was sensible as well as cultivated, high-spirited, and after her marriage transacted business to a considerable extent." She died Jan. 14, 1835.

The habit at once of Thrift and Benevolence.

The following extract, from a chapter in Barnard's Educational Biography, devoted to Mrs. Emma Willard, the distinguished principal of the Troy Female Seminary [Vol. I, p. 125-6], shows that Mrs. Emma Willard's mother [Lydia Hinsdale Hart] acted in the same spirit of large beneficent thrift, which was a characteristic of Mrs. Jonathan Edwards' household management.

In speaking of her domestic education, it is said of her mother, that "she was practical, quietly executive, severely but unwaveringly industrious; and although well educated for her day, and tenderly reared, and excelling in all the delicate fabrics of the needle, she had in full perfection the New England trait of making much out of little, and a little out of nothing. She had the true economy, not of selfish hoarding, but of industriously producing, carefully preserving, and wisely distributing. As an instance, on sorting the wool, as was the woman's part, after the shearing in the spring—when the best portion had been laid aside as material for the father's clothes, the second best selected for other men's wear, the third best for the women's wear, then family flannel and blanketing were to be provided for, and afterwards coarse remnants laid aside for mops. There yet remained scattered tags and burred clippings—to be burnt? No, not so. They were gathered by themselves, and her little girls, "Nancy and Emma," were quietly told by their mother that they might take their baskets, when their work was done, and carry it to the pasture field (where they loved to go), and scatter it upon the bushes which grew around the pond, so that the birds might find it to build their nests with.

Thoughtful, loving woman!—sublime in that charity which embraces all the creatures of God. "Gather up the fragments, that nothing be lost," she had read as the words of her loved Master, and in imitation of Him, she "considered the fowls of the air which your Heavenly Father feedeth." And it was this same wise bestowal of the fragments, in imitation of the mother by the daughter, which made the Troy Seminary a source of daily support and comfort through many years, to outside poor, numbering at times many families."

To be continued.

THE MODEL SCHOOL AT BRUSSELS.

Established by the Belgian League.

INTRODUCTION.

THE *ECOLE MODÈLE* at Brussels was established by the Society to indicate to the public the possibility of reducing to actual enjoyment the principles and methods of elementary instruction, and all the advanced notions of school construction, equipment, and organization, held by its members, or tried elsewhere, for children under fourteen years of age. Its proposed object is to secure the best mental and physical training of its pupils, without special reference to the amount or practical usefulness of the knowledge gained. "To train the senses to nicer discriminating power; to improve the retentiveness and quickness of memory; to develop the faculties of reasoning and the imagination and to give a healthy tone to the latter; to excite moral approbation and disapprobation for actions to which the terms *right* and *wrong* respectively and generally correspond; and especially to develop the bodily organs—these are the aims of the model school education."

The pupils, in age and social status, correspond to those of our public schools below the High School in communities with the average appreciation of education. They enter at the age of five and remain till fourteen or fifteen. They are classified into Kindergarten grade, which receives all under seven years, from which they pass into an intermediate school, where they remain till they are nine, and then become members of the Primary School, where they are taught in a general course for two years, at the end of which course a portion of each day is devoted to active preparation for some industrial pursuit. This Primary School corresponding to the Primary and Grammar grades of our village and city public schools, includes the Kindergarten, and the industrial methods of our advanced schoolmen. The school, as originally established, aims to be free to members of the association or League, but the resources at the command of the Board of Management have compelled the exaction of fees which amount to 150fr., or \$30 a year.

SCHOOL CONSTRUCTION AND EQUIPMENT.*

The building consists of two stories of modest pretensions, as to size, cost, and style. The class-rooms all open into the central hall, and are arranged in two stories. On entering the school, you find yourself in a grand hall, to the left of which is the porter's lodge, and to the right a reception-room for the parents of the pupils and other visitors. There is also on this floor a room originally intended for a cloak-room, but now

* This account is drawn up from a paper read Oct. 13, 1880, before the Educational Society (London), by Philip Magnus, B. A., and printed in the *Journal of Education* (for November), published by Messrs. John Walker & Co., 96 Farringdon street, London.

used for models and general apparatus. Above these are the private rooms of the head-master, as well as a drawing-room and museum and library for the teachers. The class-rooms on the first floor open on to a gallery, which surrounds the central hall. This hall contains an area of about 4,280 square feet. There are 12 class-rooms; and the maximum number of pupils admitted into a class is 32. The accommodation of the school is consequently limited to 400. Each class-room is about 29 feet long, 23 feet broad, and 17½ feet high, giving about 346 cubic feet for each pupil. In all the classes, the desks are so arranged that the light enters the room on the left-hand side. Every child has a separate desk, the form of which is not at present uniform in all the classes; but I understand that the question of the shape of desk is now settled, and that the inclination of the desk is 20°, and the seats are shaped and provided with backs, which are slightly curved. The most remarkable feature of the class-rooms are the black-boards, which are continuous round three walls of the school (forming a complete *lambri* or *dado*), the fourth wall being occupied by the master's desk and the ordinary black-board used for the purposes of demonstration.

REGULATIONS OF HOURS OF STUDY AND EXERCISE.

The hours of instruction are from 8 till 12, and from 1.30 to 4.30, thus giving seven hours' school work. This comprises some amount of recreation, and is inclusive of home work. Each lesson occupies three-quarters of an hour, and is followed by a quarter of an hour's recreation, in which the pupils, under certain general restrictions, are quite free. No home work, except in certain cases of carelessness, or for some special object, is given to the pupils. With respect to this point, it is thought that "nothing is more beneficial than evenings passed in the calm enjoyment of family life." In fact, an important feature in the school system is the endeavor to enlist the free coöperation and interest of the parents in the pupils' daily tasks and progress. A number of regulations are framed with this object. Of these, the best worth noting is that which recommends—in the strongest terms short of compelling it, which is impossible—that every pupil of the school shall read aloud, for a quarter of an hour, in the presence of his family, in accordance with certain rules, referring to position, etc., which are given on a circular sent round to the parents of all the pupils. There is, no doubt, much to be said in favor of such a practice. The practice is also rigorously enforced of requiring the pupils to answer all questions put to them by the masters in complete sentences, as a means of securing a good elocution, and, at the same time, of impressing more firmly on the memory the answer required. Discipline is maintained, as indeed it is throughout all schools in Belgium, without the use of corporal punishment, by the moral influence of the masters, by good and bad marks and weekly reports, and by a graduated system of punishments, the chief of which is the arraignment of the boy in the presence of his parents before the committee of the school. In those cases only in which the parents fail to attend are they requested to withdraw their child from the school. Here, too, the masters and the parents consult together over the discharge of a joint duty. The matter

of religion is left entirely in the hands of the parents. No interference with the religious opinions of the pupils is permitted in the school, as no religion is there taught. Moral conduct is stimulated, altogether apart from the religious sanction, by the force of habit, by discipline, by a constant appeal to the common good of the school, and by the influence of high ideals.

PHYSICAL TRAINING.

Physical exercise is promoted chiefly by well-organized drill. One of the most interesting sights which I witnessed in connection with this school was the drill exercise in the large hall. Here the boys, from ten to fifteen years of age, went through their manual exercise, under the general orders of their sergeant; they marched in lines of two and four; they performed various manoeuvres, and ultimately they formed a square round the Belgian colors, for which the boys are taught to entertain a completely military respect. During these exercises, the word of command was taken up by half-a-dozen small boys, who played their parts as sub-officers with perfect discipline, and whose shrill small voices, raised in command, were strictly obeyed by the boys forming the separate divisions. At the close of this very interesting exercise, the boys sang most pleasingly, and with exquisite feeling, to the accompaniment of the organ. Nothing could have been more gratifying than the manner in which their military exercises were performed.

EXCURSIONS.

An important feature in the organization and instruction of the school, aside, but in connection with the curriculum, is the periodic excursions. These are organized, not as an occasional treat or reward for the more industrious of the boys, but as an essential part of the school work; and the refusal of permission to a boy to join in the excursions is one of the punishments to which a boy is subject. Each class makes at least two excursions every month. The object of these excursions is to give the pupil a practical acquaintance with a variety of things which it is desirable that they should understand, and which otherwise they would know by the medium of books only. It is a part of the realistic system which governs the teaching of the school—that sense-knowledge should be appealed to wherever sense-knowledge can be gained. Everything connected with these excursions is carefully prepared beforehand, and such information is given to the pupils as will enable them to understand and appreciate the signification of the objects they will see. The excursions comprise visits to historical monuments in the city, to museums, to factories, to zoological gardens, to places illustrating facts in geography and geology. On returning from each excursion, the pupils write a description of what they have seen, and of what they may infer therefrom, and these descriptions are discussed and corrected by the masters.

STUDIES AND METHODS.

In drawing up the programme, and indeed in every regulation of the school, the objects of the founders are made plainly evident,—viz., to train and develop the faculties, and to evoke spontaneity. "The culture of the intellectual faculties is the principal object," says the programme,

"of the pedagogic reform for which the Model School has been created." Carrying on the system of Froebel, which presents to the child's view, so as to excite observation, actual objects, it comes about, by a natural coincidence, that the objects with which science is concerned present the best possible materials for the improvement of the powers of observation, the strengthening of the memory, and the development of the reason. Reached by a somewhat different method of reasoning, Herbert Spencer arrives at the same result. Herbert Spencer, it must be remembered, places the usefulness of a study,—*i.e.*, its practical service in life,—in the foreground, in the choice of subjects of instruction; and finds, by a similar coincidence, that those subjects which are best worth knowing yield, in the acquisition of the knowledge, most discipline. The founders of the Model School attach first importance to mental discipline. "That the faculties of a child are usually employed is the chief thing; the subjects of instruction are a matter of secondary importance." But they equally arrive at the same conclusion, that the elements of science afford the most suitable ideas for the development of the intellectual faculties. Accordingly, science-teaching occupies a prominent place in the programme of the studies. In the youngest classes, this consists of little more than placing before the child different objects, and giving to each its proper name. Nothing more is explained than is sufficient to draw the child's attention to the external appearance of the animal, plant, geometrical form, or other object that is being inspected. In this way the child's acquaintance with things is extended, and, at the same time, his knowledge of names. In the higher classes, each of the sciences in turn furnishes subject-matter for instruction; and the school authorities are fully aware that their system is open to the reproach that the teaching is superficial, and not thorough. This they admit, to a certain extent, and justify on the ground that the end of primary instruction is to arouse the intelligence, to bring the faculties into communion with as much of the outer world as possible, to draw simple inferences only, and to leave till a later period of study all complex reasoning and wide generalizations. Thus the programme of instruction includes the elements of Botany, Zoology, Mineralogy, Chemistry, Geology, Physics, and Mechanics. In estimating the value of this general and elementary science-teaching, it must be distinctly remembered that the teaching is not book-work. Nothing could be further removed from the science-teaching of the last half-century, which was gained from books on useful knowledge, and consisted generally of questions and answers, than the science-teaching of the École Modèle. Whatever may be its imperfections, it is what it professes to be—*real*. It is not gained from reading lessons, how economical soever such a process may be. If a child of the École Modèle describes a leaf of a tree, or the petal of a flower, he has seen it; if he tells you of the structure of the wing of a bat, he has handled it; if he talks of the bones of the human foot, he has taken them to pieces and replaced them. Indeed, of such importance is the knowledge of the structure of the human form considered, that an actual human skeleton is suspended in every class-room of the school. The teaching of Chemistry is equally real; and if you will pass into one of the class-rooms on

the right, you will find a roughly constructed laboratory, and a number of boys busily engaged in the preparation of the simpler gases. Their nimble fingers are accustomed to manipulation, and the experiments previously performed by the teachers are easily and accurately reproduced by separate groups of boys.

I need not say that considerable attention is given to the teaching of Geometry, which occupies an important place in the time-table of all the classes of the school. But it is not the Geometry of Euclid; it is not the Geometry, or what unfortunately passes for it, of nine-tenths of our English schools. The pupil of the Model School of Brussels, and indeed of the majority of Continental schools, is not plunged wholly unprepared into the complex deductions of Euclid, or any other system of demonstrative Geometry, the difficulties of which are so often met by the pupil learning by heart the words of the propositions to be proved, without understanding anything of their signification.

In the first place, the pupil is shown solid geometrical figures; he is then exercised in constructing them for himself in clay, in cardboard, or with wires; he is then shown how to distinguish the several parts of which figures are composed, and so to understand the definitions; to recognize in other objects than in mere geometrical figures the recurrence of the same forms; and further, to judge distances by the eye, so as readily to distinguish five inches from seven inches. This elementary teaching is followed by a more intimate investigation into the characters of solid bodies. The pupil is exercised in making sections of prisms, spheres, cylinders, and cones; in methods of measuring areas and volumes; in obtaining by actual intuition a knowledge of the properties of different figures; and, finally, in geometrical constructions.

Let me ask you to follow me for a moment into a class-room on the right, where a lesson in Geometry is being given to a class of boys of about ten years of age. The walls are furnished with shelves, on which various objects are ranged. Here is a complete set of weights and measures; near these are a number of geometrical forms,—some in wire, some in wood, others in section. Further on are skeletons of other animals, and a collection of different kinds of wood. The eye is then caught by a series of surfaces illustrating the various shades of color; and close to this is a case of different woolen and cotton materials, and a variety, too numerous to recount, of other objects appealing to the senses for recognition. Near me is the master, standing on an ordinary platform, with a desk in front of him, and a black-board at his side; and round the room, with their backs to the master, are ranged the boys, each in front of his paneled black-board, with chalk in one hand, and sponge moistened at the china sink with which every class-room is provided, in the other. And now the master commences to dictate a geometrical exercise to his pupils. Before him is an irregular six-sided figure, with sides of unequal length. "From the point *A* draw a horizontal line *AB* of 11 centimetres in length, at *B* construct an angle of 120 degrees," and so on; and gradually is evolved on every black-board an accurately drawn facsimile of the figure from which the teacher has dictated the exercise. Mistakes undoubtedly occur, but they are corrected when the figure is examined and the source of the error clearly pointed out.

Let us witness a very early lesson in Geography. As maps are indispensable to the study of Geography, through the practical and absolute inability of everyone to travel over the countries with the general features of which it is necessary to be familiar, it is very essential that a child should have a clear idea of the meaning and purpose of a map. We are standing in the big hall on the ground floor. The plan of the school is exhibited before us. The boys are gathered round it. One boy holds a long pointer, and indicates on the plan a course which he proposes another boy shall take to reach a certain spot on the school. The course having been indicated, a third boy objects that it is impossible, as it would necessitate the passing through a wall, or the jumping over a high rail. The course being duly altered, a boy at once proceeds to travel over the ground described on the plan, and having arrived at the place proposed, he halts and makes known his position by showing himself on the gallery, or by letting himself be heard. Sometimes he goes wrong, and another boy corrects his route. This game of Geography seems to amuse the small boys very much, and is undoubtedly a practical way of clearly explaining to young children the meaning of a map.

I need hardly say that Drawing is taught throughout the entire school, and not as an accomplishment, but as an essential of primary instruction. And I hope I may be pardoned if I avail myself of this opportunity to express the hope that Drawing may become, before long, an obligatory subject in all our Board Schools.

With respect to the question of Grammar, let us see what is done at our *École Modèle*. The child obtains by practical experience an acquaintance with the elements of Etymology. He is able to distinguish a noun from an adjective, and an adjective from a verb; he discovers, too, the difference between such words as "of" and "to," and categorematic words. Some notice of inflection he will also necessarily obtain. But Grammar is regarded as an abstract science, which has its proper place in secondary education. The teaching of it to young children is pronounced harmful.

A subject of instruction, which appears to have given great difficulty to the founders of this school, is History. All practical teachers will understand the kind of difficulty which the teaching of this subject presents, when it is taught for its own sake, and for the development of the faculties, and not for the satisfaction of an examiner. We cannot place Alcibiades and Julius Cæsar, Charlemagne, St. Dunstan, Queen Elizabeth, and Isabella on the table, and make them like puppets re-act the scenes of their past lives. We cannot reproduce the circumstances in which they lived, nor realize the influence of the element of time in the production of bygone events. Indeed, the question of time gives rise to two difficulties; first, the difficulty of enabling children to realize the interval between the past and the present; and secondly, the difficulty of enabling them to form an idea of the intervals between different events in the distant past. History is spread before the child's mind, like the stars of heaven are before the vulgar gaze. Our eyes fail to tell us how far they are away from us, or how distant they are from one another. But the realization of the past is perhaps more difficult; and History, be it remem-

bered, is studied before Astronomy. Nevertheless, the teaching of History finds a place among the subjects of instruction of this strictly Real-Schule; and, in order to give it a real character, and to bring home to the child's mind the method of historical research, so that the word "authenticity" may have a clear signification, the teaching of History proceeds from what is near to what is remote. Commencing with the study of family life, and passing to the history of the city itself, to the changes that have taken place in its structure, in its streets and buildings, etc., and proceeding thence to the history of the reigning King, and the events of the last few years, the teacher works back to a period within the memory of the parents of his pupils, whose reminiscences are made available, in order to furnish the child with the notion of tradition. From our own history to the history of other peoples the transition is easy. In bringing home to the child's mind the surroundings of bygone periods, frequent use is made of pictures, maps, and other objects that serve to illustrate the habits and conditions of the people, and equally of contemporary narratives where any exist.

TIME-TABLE.

The time-table shows that the school hours are from 8 in the morning till 4 in the afternoon—8 hours in all. But as there is $\frac{1}{2}$ hour's free recreation between each lesson, and $1\frac{1}{2}$ hours for dinner in the middle of the day, the school hours are reduced to $33\frac{1}{2}$ in the week, or about 6 hours a day. Of these $33\frac{1}{2}$, 7 are devoted to gymnastics, drill, etc., reducing the number to $26\frac{1}{2}$. This distributed over 5 days, as is the case with us, would give $5\frac{1}{2}$ hours a day,—say, from 9.30 till 12.30, and from 2 till 4. You will observe that the attempt is made so to arrange the order of the subjects each day as to ensure the occupation of different faculties in turn. Further, you will note that the greatest amount of time is given to language; and that Flemish is taught as well as French. In a country where the language of the people did not differ from that of the educated classes, this would be unnecessary, and another modern language might be substituted. Under the head of language is understood reading, writing, dictation, recitation, and grammar. Science stands next in order, as regards time given to it, with $5\frac{1}{2}$ hours in the week. The subjects of geometry and drawing overlap to some extent, and we find $5\frac{1}{2}$ hours given to the two subjects. Gymnastics and exercise also take a fair share of the week's work—7 hours.

Should we ever be fortunate enough, which I trust we may be, to have a Model School of our own, it will be necessary to elaborate a scheme of instruction, and critical consideration of the scheme of the *École Modèle* will be found of the utmost use. Meanwhile, all who are interested in the advancement of primary instruction must be grateful to the *Ligue de l'Enseignement* for the opportunity afforded by this school of enabling educational investigators to see the practical results of methods of teaching, and of the applications of theoretic principles to the work of instruction, which a variety of circumstances, too potent to be set aside, prevent our observing in our own schools. I have no doubt whatever that the foundation of a Model School in London would do more to improve primary

teaching throughout England, and so raise the moral, intellectual, and physical well-being of our working classes, than the publication of any quantity of books, the delivery of any number of lectures or speeches on the principles of education. Of making of speeches there is no end; let us now have facts and experiments. Such a school might be established by the School Board; by private subscriptions; or it might be founded, for paying pupils, as a public company,—in which case, as in the High Schools for Girls, a fair dividend might be gained on the subscribed capital. I should esteem myself too much rewarded for the little trouble I have had in bringing before you this description of the Brussels School if the remarks I have made should lead to the establishment of a Model School in this country.—*English Journal of Education for Nov., 1880.*

INTUITION AND INTUITIVE METHODS.

BY A. SLUYS.

Director of the Model School, Brussels.

QUESTIONS PROPOUNDED BY THE BRUSSELS CONGRESS.

Has experience discovered any rocks to be avoided in the use of intuitive methods?

What is the intuitive method?

What are the sciences of observation to be taught?

Is it best in primary schools to co-ordinate scientific notions and group them under the name of the science to which they belong, or to place them under the general denomination of object lessons?

LITTRE defines intuition to be: "sudden, spontaneous, indubitable knowledge, like that which the sight gives us of light and sensuous forms, and consequently independent of all demonstration."

In Kant's system, intuition is: "the particular representation of an object formed in the mind by sensation."

Larousse attributes the same signification to the word; "it applies," he says, "to every clear and immediate perception; and we call the faculties to which we owe perceptions offering this characteristic, *intuitive* faculties." "These are distinguished from *reflective* faculties, which, needing the support of knowledge before acquired, or of hypothetical data, only arrive indirectly at their end."

"In 1817," says M. Buisson, "the word intuition made its entrance into the official teaching at the Sorbonne with all the *éclat* of Mr. Cousin's word."

No French dictionary gives the definition of this term in its pedagogic acceptance.

The Intuitive Method.

The expression *intuitive teaching* is the equivalent of what the Germans call *Anschauungsunterricht*, which is sometimes translated *teaching by inspection or the sight*. These expressions are improper, for the intuition of things is acquired by the other senses as well as by the sight.

Intuitive teaching is that teaching which proceeds in conformity with the laws of the development of human intelligence. It consists in making the child observe things directly by the senses, in teaching him natural history in nature itself, physics with the necessary instruments, chemistry in the laboratory, industry in workshops and manufactories. In intuitive teaching the perceptions and the words that express them are furnished, and then the mind is exercised in judging and reasoning upon the exact notions acquired by observation. It is the opposite of dogmatic and purely literary teaching, which considers language as the principal factor of intellectual development, and which sets forth notions of things under the form of verbal explanations, definitions, rules, laws, formulas, descriptions, reasonings, etc., without

having beforehand prepared the understanding for comprehending them by exercises of direct observation, or by experiments.

The idea of making observation and experiment the basis of the study of nature comes from Bacon, who was the precursor of a radical revolution in science, in teaching and in philosophy. At that epoch what was called science was not worthy of the name. The most absurd things were taught by the dogmatic powers, which consisted in affirming without proof, without demonstration, without serious discussion. Philosophy, confounded with theology, was but a science of words and empty reasonings. Nature was unknown, scholasticism having hidden it under a thick veil of errors, prejudices and superstitions.

No one thought of opening his eyes to observe the most simple facts and phenomena, and man walked about like a blind man in the midst of nature, of which he understood nothing. The smallest phenomena frightened him; he attributed them to occult and supernatural causes, which led him into the strangest aberrations.

As early as the 13th century Roger Bacon had attempted to draw the attention of his contemporaries to nature, but his voice was not listened to, and he passed for a sorcerer. People still continued for ages to live outside of realities, to nourish their minds exclusively upon the reading of Greek and Latin books, to carry on science according to Aristotle, and to consider the *Magister dixit* as the supreme reason of all things.

It was the Chancellor Francis Bacon who attempted in the 16th century completely to modify ideas on the subject of method. "It is not in the books of the ancients," he said, "that we are to study stones, plants and animals, it is in nature herself, which alone can redress errors and enrich us with new knowledge." These words were fertile in important results. They were the death sentence of the old scholasticisms. Science was at last to free itself from its leading strings. The illustrious pedagogue, John Amos Comenius, introduced the principle of observation or intuition into his general plan of study. "During the first six years," said he, "put into the child the foundation of all knowledge necessary to life. In nature show him stones, plants, animals, and teach him to make use of his limbs (*natural history, physics*); to distinguish colors (*optics*); and sounds (*acoustics*); to contemplate the stars (*astronomy*); he will observe his cradle, the room he lives in, the house, the neighborhood, the roads, the fields (*geography*); make him attentive to the succession of day and night, to the seasons, to the divisions of time, the hours, weeks, months, festival days (*chronology*); let him learn the administration of the house (*politics*); let him familiarize himself with the first notions of calculation, sales and purchases (*commerce*); the dimensions of bodies, their lines, surfaces, solids (*geometry*); he will hear singing, and his voice will learn to reproduce sounds and musical phrases (*singing, music*); he will survey the formation and development of his mother-tongue (*grammar*); he will exercise himself in expressing his thoughts and sentiments by

gestures and the inflexions of the voice (*rhetoric*). By these means the maternal school will develop the germs of all the sciences and all the arts."

Comenius was the true creator of *intuitive teaching*. The following principles, taken from his works, characterize this method: "It is a fundamental error to begin teaching with language and to end it with things, mathematics, natural history, etc., for things are the substance, the body; and words are accident and dress. These two parts of knowledge are to be united, but it is necessary to begin with *things* which are the object of thought and speech.

"We should at first exercise the senses (*perception*); then the memory, then the intelligence, then the judgment (*reasoning*); for science begins by observation; the impressions received are then engraven on the memory and imagination; intelligence then takes possession of the notions collected in the memory, and draws from them general ideas; at last draws conclusions from things sufficiently well known, and co-ordinated by the intellect.

"It is not the shadow of things that makes an impression upon the senses and imagination, but the things themselves. It is, therefore, by a real intuition that teaching should be begun, and not by a verbal description of things."

All the pedagogues since Comenius, and almost all the philosophers who have written upon education, have demonstrated that it is necessary to begin it by that of the senses, and have protested against the abuse of verbalism and abstraction in early instruction. In France, Montaigne, Rabelais, J. J. Rousseau and many others, eloquently defended these ideas. Basedow, Francke, Locke, Pestalozzi, Fröbel based their systems of education upon this principle of observation by the senses.

Pestalozzi, although he understood the capital importance of intuition, and defined *intuitive teaching* as that in which the study of things and that of words are always closely united, yet did not succeed, in spite of his patient efforts, in a happy application of his theories. Most of his lessons were only mechanical repetitions of words and phrases which the instructor dictated in some way, and the pupils repeated after him.

The continuers of Pestalozzi's system, Von Türk, Grassmann, Harnisch, have recourse to *intuitive teaching* in order to arrive at the knowledge of language, in order to succeed in expressing correct thoughts correctly. Graser assigns to *intuitive teaching* a more elevated and more general aim. He considers it an instruction from which all branches ramify. This is the thought of Comenius.

Diesterweg and Denzel, initiated into the experimental psychology of Beneke, also made *intuitive teaching* the foundation of instruction in all branches, but they also attribute to it great value as a means of development of the intellectual faculties. This is the opinion which is coming to prevail more and more at the present day in Germany.

With these pedagogues, the object which is subjected to the obser-

vation of the child is an important educative factor; they think it is to be observed less with the aim of furnishing an item of positive knowledge than with that of exercising the senses, the attention, the spirit of observation, and language. They also guard against that pretended intuitive instruction which consists in endless digressions without end upon the pointer, pen handle, pencil, slate, etc.—which have been so much abused under the name of *object lessons*, and which have discredited *intuitive teaching*.

Fröbel brought the thought of Comenius and Pestalozzi to completion. While Comenius stopped in his application of it to show graphic representations (*orbis pictus*) of the objects to be observed instead of taking the objects themselves, and while Pestalozzi contented himself with attracting the attention of the children to the things found in the school-room, and with making them repeat his phrases about them, Fröbel introduced into his school the spirit of *action*. In his system the child observes and gives his own account of his observations, and moreover, he imitates, works, combines, creates. The school is no longer some place where a master teaches *ex cathedra* to pupils who are expected to believe him and repeat his phrases. It is a medium in which the child blossoms out freely according to the laws of his nature; the notions he acquires by observation are immediately utilized by their application in exercises or games that develop the creative faculties. He learns to become acquainted with things, to draw them, to represent them, to construct them, and he is incessantly occupied in finding new combinations and applications of them.

This is the way in which *intuition* is to be understood. It is not a special branch of the programme, it is a principle which embraces the whole teaching. *Intuitive teaching* may be defined as that which develops all the faculties by employing them in a useful manner, and which proceeds by means of exercises which are provocative of sensations and excite spontaneity and keep it awake.

Intuitive teaching tends consequently: 1. To exercise the faculties of the child with the aim of developing them. 2. To furnish exact notions upon the different sciences and to give aptitude in utilizing them. 3. To make known perfectly the signification of terms, by applying them to the ideas furnished by sensation or created by reflection bearing upon the perceptions acquired.

Of these three important points of view, the first should predominate. Indeed the brain of the child is not an empty tablet, or a receptacle to be filled with words, notions, ideas which the educator introduces into it in fragments. The child, on the contrary, is a thinking and acting being, endowed with an initiative, possessing as germs the active faculties which are to be awakened, excited, developed, in order that they may arrive at their complete blossoming; he is destined to become a free man, master of himself and responsible for his acts, capable of *perfecting himself*.

The most complex acts of intelligence have their point of departure in sensation. Ideas present themselves to the mind of the little child under the intuitive form, and are entirely independent of the words which express them.

These ideas are at first vague, floating; they take consistence and become an integral part of the memory only by a series of strong sensations, which produce more and more profound impressions. The words by which we designate them and which the mother patiently endeavors to make the child retain and repeat, end by awakening in him, when they strike his ear, the idea which they represent, even a long time before he knows how to pronounce them. By degrees he forms his vocabulary and he often creates words for which he afterwards substitutes those of ordinary language. Seeing a dog which is barking, the child imitates his cry and "wow wow" becomes the name of the animal. He repeats it every time he sees a dog, and even when his attention is drawn to a sketch or an engraving that represents one.

Mothers' Intuitive Method.

The mother naturally follows the processes of *intuitive teaching* in the first education she gives to her child. She shows him objects, makes him listen to sounds, inhale odors, touch and handle solid bodies, observe and execute different acts, taste different substances, and at the same time tells him words and makes him repeat them which represent the ideas that arise from these sensations. The child thus learns his substantives, adjectives, verbs, etc., and every word with which his memory is enriched remains intimately associated with a clear and exact notion.

Sensation then is the natural mode of the formation of ideas. Words are only the representative signs of ideas; as Comenius said, they are only the accident, the dress, while things are the substance, the body. The fact that in all languages abstract conceptions are represented by words borrowed from the vocabulary of concrete things, proves that sensation is the origin of all our knowledge. It is only quite late that the child attains to the comprehension of abstractions, relations, scientific or moral laws. He seizes the general or abstract sense of words, only after having attached a concrete sense to them. The passage from the concrete to the abstract is not made hastily. The mind must be long prepared for it, and it is only so prepared when it possesses a certain power acquired by the faculties, by means of a *gradual intuitive teaching*. It is impossible, for instance, to furnish exact, mathematical notions of the terms: *line, circle, cylinder*, by the aid of a definition even carefully explained. It is first necessary to attract the attention of the child to the material things which show these forms, to show him the edges of a toy and call them lines, to put a cylinder before his eyes and call it by that name, to make him observe that its basis is a plane, and that the line that limits it is everywhere at an equal distance from the center, etc. The notion will be so much the

more clear if the child has the opportunity to observe many geometric figures, and has constructed a great number, and imagined different ways of combining them. By degrees he will create abstract notions for himself and mathematical concepts, and then he will understand the definitions of them and find them for himself.

All the other conceptions of abstract nature such as those expressed by the words *right, goodness, duty, justice, law, etc.*, could not be understood by children by the aid of a definition or a verbal description. But these words must not be banished from their vocabulary. By using them in a concrete sense according to the opportunities that present themselves during school life, their meaning will be seized. When the notion is once acquired, it may be fixed by a definition.

The culture of the faculties having its point of departure in sensation, we must attach great importance to the perfecting of the senses considered as primitive faculties. The sight is generally the only sense we exercise. We thus deprive ourselves of numerous means of intellectual development which are the source of many usable sensations. Hearing, smell, taste, touch can alone furnish us with exact and clear notions of a great number of terms of common parlance. M. Const. Delhez, whom death swept away at the very moment when success was about to crown his work, had imagined a *gymnastics of the senses* which agrees perfectly with the first stage of primary teaching. In this system the senses and consequently the intelligence are exercised by making children observe colors, and their shades, the forms and relations of position of objects, sizes, sounds, tones and qualities of tones, temperatures, weights, savors, odors, etc. This series of exercises is a first *intuitive teaching* which furnishes innumerable fundamental notions and the exact meaning of the words which represent them.

Subjects of Intuitive Instruction.

All the sciences of observation lend themselves to *intuitive teaching*. At first sight it seems impossible to teach them in a primary school because it is supposed that the intelligence of the children is not sufficiently developed to comprehend them. There is reason in this view, if science has been looked at as it is conceived in the higher teaching and explained in the books. The science which proceeds by the way of deduction, and which is supported upon hypotheses, definitions, laws, and abstractions is not to be approached in the primary school. Far from being of any use for the culture of the intelligence, it clogs the faculty of observation, and degenerates *fatally* into a science of words. To begin with abstract notions is *intuitive teaching* backwards.

The order to be followed in the primary teaching of these sciences is that indicated by the historical development of each one of them. They have gradually arranged themselves. The attentive observation of things and phenomena has been the point of departure of true science. Premature theories and hypotheses have been completely overturned in proportion as observations have become more complete.

and have been made with more care. Thus it is by observation that we must proceed in the primary school.

We must not seek to accumulate numerous notions in the brain, nor wear out the attention of the child by going into trifles and *minutiae* which are not interesting. It is best, on the contrary, to choose in the domain of each science the notions which may most easily lend themselves to the observation, and give opportunity for application which may exercise the initiative,—the spirit of invention.

By concentrating the attention upon fundamental scientific notions in a *tangible form*, presented in all their brilliancy by interesting experiments, we prepare the understanding for comprehending science.

Zoology—Botany—Mineralogy.

Natural history—animal, vegetable and mineral—offers the most simple exercises which can be suitable for beginners. It is purely descriptive. The principle of intuition is easily applied to it, the programme comprises the knowledge of a series of types put before the eyes of the pupils and studied by way of analysis and comparison.

As much as possible, it is necessary to take living types of animals and vegetables, and have recourse to artificial representations by pictures only when it is impossible to do otherwise; the difficulty of doing it is not insurmountable. An extensive series of animals and vegetables can usually be seen in the locality and its environs wherever a school is situated; school excursions for this part of the programme offer the best means of furnishing intuitive notions. It is very important constantly to attract the attention of children to the gradual transformations of organisms (as in the caterpillar) and which they will see to be a vast series, going by a train of modifications from the most simple existence, the cell, up to the most complex ones. The mind is thus prepared for the conception of modern science and put on its guard against the prejudices which encumber and disturb the rational study of natural history.

The best means to ensure that this teaching shall produce the greatest results consists in exercising the children in making collections themselves during their excursions.

This habit of making collections of objects to be studied obliges the child to pay attention to the special characteristics of objects, to remark their resemblances and their differences; it thus gives not only numerous sensations which help the ideas gained to be more profoundly understood, but it prepares him to understand classification.

Geography—Astronomy—Geology.

Geography, astronomy and geology are also concrete sciences whose study in the primary school is possible by the intuitive process, and which opens the mind to the most elevated conceptions.

The point of departure of the teaching of geography is the notion of orientation furnished by observation of the apparent motion of the sun

and the position of the polar star, and the use of the compass. The sight of the horizon, some experiments that will reproduce the phenomena observed which have for their cause the sphericity of the earth, lead to this last notion as well as to that of the isolation of our planet in space.

The meridians which are at first shown as real lines traced upon the ground in the direction of the shadow of a vertical line at noon, afterwards become the imaginary circles whose notion and utility the child seizes.

The map is made perfectly intelligible if in the beginning the child is made to draw a map of the school-room, then that of the school-house, afterwards adding the surrounding streets. The common names of the vocabulary of geography are learned by the sight of the things they designate, and which are met with in the school excursions or imagined by plastic or graphic constructions. At last real journeys into the country, during which the pupils consult the map, fictitious journeys upon the globe, the dramatic recital of great discoveries made in the presence of pictures representing picturesque views of striking regions where it is impossible to take the pupils, are so many means of making the teaching of geography intuitive.

The observation of the sun's apparent motion and of the polar star is also the point of departure for the elementary instruction in astronomy, which opens a vast and wonderful field to the attention of children. Few sciences can rival this in the profound influence exercised upon the imagination. How many men there are, even well-informed, who never raise their eyes toward that starry vault which was the first field of observation to primitive nations! This is because neither primary instruction nor secondary instruction prepare the mind for the study of it. We are satisfied with reciting a manual affirming facts and phenomena which neither the professor who teaches, the pupil who listens and repeats, nor often even the author who wrote the book, have observed with their own eyes! The memory is thus burdened with a knowledge of words which has no salutary action upon the intelligence. The primary school can, however, throw out landmarks for this study. It is sufficient sometimes to collect pupils in an evening, make them observe the starry heavens, teach them to know a few constellations at sight, to distinguish the milky way and a few planets, and let them add some simple experiments by which they may verify the apparent and real movements of the stars. It might be possible to create a very elementary observatory in every private school at very little expense. This is an important question which deserves attention.* But without its being necessary to have recourse to special instruments, there are many things which can be made the subject of observation, and which constitute the basis of an elementary teaching

*A very good spy-glass, even an opera-glass, will show the moons of Jupiter and the rings of Saturn.

of astronomy. The words: sun, planet, satellite, milky way, star, comet, eclipse, and so many others which have entered into common parlance, are to many minds vague terms to which are attached only incomplete or false notions. These would convey their true meaning if in the primary school for six or seven years a few observations of the kind just rapidly sketched could be carefully made. The history of astronomical science, properly presented, would be of use to point out the errors, the prejudices and superstitions which the spectacle of the heavens has inspired in man for the want of correct ideas.

As M. Tempels says: "In the upper classes astronomy leads the teacher to speak of infinity, of the genius of man which has ever been engaged in sounding its depths, of the emotions inspired by this study, of the care with which it must be guarded from the pride of science as well as from the terror of ignorance. Considerations of this nature, even measured by the intelligence of a child, but made with simplicity and luminously, open large horizons and dispose minds for philosophic meditations, for the want of which the mind remains narrow and unprogressive."

Geologic phenomena offer material for considerations of the same kind. Here, again, the treatises upon the science can be of no use except to the instructor who can find in them the suggestions and knowledge he needs. It is in nature itself, that the subjects of the lessons must be sought. Let us draw the attention of the child to the arrangement of the rocks, to their composition, to the fossils they contain, to the action of erosion exercised by the courses of water upon their sides. These intuitions, incessantly repeated during the whole period of primary study, exercise the faculty of observation, give rise to reflections upon the causes of geologic phenomena, and are a provision against the false notions and old theories which fill the little books with which the schools are inundated.

Experiments in Physics and Chemistry.

Physics and chemistry are sciences which treat of matter, but which have for their special object to study its properties. They may be called abstract-concrete, and seem to offer less hold for *intuitive teaching*, but in the primary school the pupils may be led to physico-chemical generalizations by the path of experiments. The most easy and simple notions are chosen to be rendered intuitive, and by the aid of apparatus, they can be presented in a way to strike the mind of the child vividly. This teaching must be made useful to the pupils by allowing them to make their own experiments. In this science, as in all the others, it is necessary carefully to avoid beginning with definitions and laws. Children cannot comprehend these until nearly the end of their studies and after they have made innumerable observations in the cabinet of physics and in the laboratory. The beginners then will have nothing to do with molecules, atoms, hypotheses upon heat, light, electricity, etc.

The chemical terminology, notations and equations cannot be taught *ex professo*; but used experimentally in the upper classes, they become familiar by degrees.

Physics is a science which permits the incessant application of the fertile principle of action in aid of the numerous experiments which the pupils can imagine and perform themselves. Mechanics is also very valuable in this point of view. The notions of *force* and *motion* may be inculcated by the observation of moving bodies; the study of simple machines makes the pupils ingenious, and a powerful argument for culture can be drawn from them by inciting the pupils to construct little mechanical objects and resolve certain problems, not by the aid of figures, but by means of apparatus.

Geometric Forms and Construction.

Fröbel made geometry one of the pivots of his system. It is indeed a science which teaches rectitude of mind and the process of reasoning. It prepares the child to conceive of abstraction without which science is impossible. It must be presented in the primary school under the concrete and intuitive form, by the aid of material figures and graphic constructions. At first the child learns to distinguish the different solids, to name them, to make them of paper, of wire, or of clay. These exercises give skill to the fingers, justness to the eye, and furnish fundamental notions of geometric terms which it is impossible to make understood by beginning with definitions. In the kindergarten, large use is made of these exercises, which the primary school should resume and complete. Most of the properties of objects are made intuitive by easy and gradual constructions. This is a vast field to be exploited.

Arithmetic—Drawing.

Arithmetic must be attached to geometry. The science of numbers is difficult only when taken in its purely abstract character, which makes it inaccessible to the minds of children. By applying it to geometry it is rendered concrete, and becomes a powerful means of intellectual development. It is the same with the metric system, which gives no useful and persistent result if confined to definitions and numerical applications. It is by making learners measure with a veritable meter, teaching them to manipulate the weights and measures, to construct square or cubic measure, to appreciate at sight the extent of bodies, that these important notions are engraved upon the mind.

Drawing is one of the most efficacious means of rendering the teaching of the sciences intuitive. Children have a special liking for drawing. This natural disposition should be taken advantage of to make them represent largely the objects studied in their different lessons. We do not speak here of æsthetic drawing, but only of very simple graphic constructions. The apparatus for teaching physics and chemistry, the machines and utensils which have been analyzed, the geometric figures which have been studied, form good subjects for

drawing. Sometimes let the child draw from objects, which habituates his eye to observe proportions; sometimes let him draw them from memory, which is a much more intense intellectual labor, and one desirable for frequent use.

Thus we see all the sciences are an inexhaustible mine of exercise, of observation for the development of the creative faculties.

When we pass in review the whole series of the sciences of observation, we are struck with the immense number of notions they contain. We are apt to think there will not be time enough to teach them in the primary school,* where writing and reading take a large place. This is a misapprehension. The important thing is not to make the children go to the bottom of all these sciences, to form physicists, chemists, geometricians of them. The accumulation of notions is an evil, for the mind can, no more than the stomach, assimilate food taken in too large quantities. It is necessary to make a choice from this mass of knowledge upon all points, to take the most important, that to which the principle of intuition can best apply. The instructor must not be anxious to teach too many things to his pupils. The important thing is to develop the faculties, and the scientific elements are the only means adapted to this culture. To form a sound judgment should be the constant aim of the efforts of the professor. He must watch with especial care not to fatigue the brain. The prodigies of ten years old are always badly balanced, and become mediocre beings. It is better, as Montaigne said, "to have the head well made than too full."

Objections to Intuitive Teaching Considered.

Intuitive teaching has often been reproached with being dry, arid, tedious; with not developing the imagination or the literary aptitudes; with suppressing the idea of pains-taking and effort, making study a kind of play; destroying religious faith, the belief in the supernatural, giving the child the habit of scientific research which leads him to positivism and materialism.

Intuitive teaching is not dry, arid, tedious, except when given under the form of *object lessons* in which the attention of the child is only drawn to objects with which he is perfectly acquainted, of which he has long had the intuition, and when things of all kinds are spoken of *which he has not seen and which are not shown to him*. Thus, a penknife is given to a pupil, and he is told that it consists of a handle and one or two blades, then the making of steel is explained, the elephant that furnished the ivory handle is mentioned, Africa and India, which that pachyderm inhabits, negroes, slavery, etc. Nothing can be less intuitive, so ordinary and so uninteresting as such exercises, which neither teach how to observe nor how to judge, or even how to talk.

Influence on Imagination and Style.

Far from cooling off the imagination, the true intuitive study of the sciences by observation develops it far better than exclusively literary

*In Belgium and France the primary school keeps the pupils till they are fourteen.

studies. The latter produce superficial minds, pre-occupied alone with form, which are in the habit of looking only at the phrase, and remain inattentive to the reality behind it. In no language is there any literary work that can act as powerfully upon the imagination as nature when observed with an attentive and intelligent eye. There is more true poetry in astronomy than in Racine or Boileau. The spectacle of the starry heavens opens to thought vaster horizons and fills the soul with an enthusiasm far greater than that elicited by the reading of an epic poem. What writer ever imagined a variety of colors, forms and manifestations of all kinds to be compared with that presented by animals and plants? What are the metamorphoses of Ovid, the tales of Perrault by the side of the wonderful phenomena revealed by the life of the silk-worm, the bee, the ant, the lowest animals and the most common plants?

It is not true that *intuitive teaching* is unfavorable to literary culture. It is, on the contrary, the essential condition of a rational literary culture. It furnishes words and the thoughts they represent from the very earliest age. It teaches to enunciate with clearness and simplicity the thoughts which have been spontaneously formed in the mind. It is true that it repudiates those rules of style which consist in amplifying a dictated summary, in describing things which have not been observed, and in recounting feelings which the child has not felt. But these exercises do not teach to express thoughts in writing, and accustom their victims to be satisfied with mere words.

There is reason in saying that the study of great writers is excellent for literary culture; but *intuitive teaching* does not exclude it; it prepares the mind to undertake it successfully. It is wrong to begin to explain authors too soon. How do we suppose a primary school pupil can reap any benefit from reading: *Animals sick with the pestilence*, a scene from *Tartuffe*, the *Imprecations of Camillus*, a *Funeral Oration by Bossuet*, an *Epistle of Boileau*, when we dare not pretend that a child of twelve years of age possesses enough experience of life, enough ideas and judgment, to seize upon the true meaning of those works, which were written for the instruction or amusement of men, and not for the education of children in a primary school? Lamartine, in his *Voyage en Orient*, makes a very just reflection *à propos* to this: "Every wave," he says, "urges me towards Greece; I touch it. Its appearance moves me profoundly, much less however than if all these memories had not withered in my heart by having been amassed in my memory before my thought understood them. Greece is to me like a book whose beauties are tarnished because we were made to read it before we had the power to comprehend it. I prefer a tree, a fountain under a rock, a laurel rose on the border of a river, under the crumbled archway of a bridge tapestried with vines, to the monument of one of those classic kingdoms which recall nothing to my mind but the *ennui* they gave me in my childhood."

But how can we form the style by *intuitive teaching*? it will be asked. Shall we only require of the pupil to describe the things he has seen and the feelings he really felt?

And why should we seek for other subjects? Do we teach style by imitated composition and verbiage?

We highly appreciate the originality of writers who are imposing by their talent or their genius, and we would make the pupils in the primary and secondary schools make imitations and amplifications which can have no other effect than to prevent that precious quality from developing! Has not Boileau, that master in the art of writing, said, "Before writing, learn to think"; "what is well conceived is clearly spoken, and the words come easily to tell it."

Intuitive teaching, which teaches how to think and produces conception before description, is what must be preferred even as preparation for literary studies.

Intuitive Teaching makes School attractive.

Shall we speak of the reproach cast upon *intuitive teaching* because it banishes pain, labor and effort by transforming studies into a species of joy? Is the school then supposed to be a gloomy place where little children are condemned to painful, wearisome labors? Is it not better to make them feel that work is not a punishment, and that the ideal, which is the sovereign good, is not repose but useful activity? *Intuitive teaching* abolishes the sterile efforts which these pupils must make to whom things are spoken of, of which they have not the least idea and which they do not see, but replaces them by that fertilizing effort of the mind which seizes with avidity the notions presented to it in an attractive form. By rendering the earliest studies painful, we rebuff the children and disgust them with study. This is why the school, so badly organized, has need of punishments and rewards as a provocative of labor, while the kindergarten and the school in which the teaching is intuitive do very well without those factitious means of emulation and repression.

Intuitive Teaching not Irreligious, nor Immoral.

Intuitive teaching has been accused of being opposed to morality, and of leading to materialism by the habit it gives the mind to admit only what has been proved, to observe only what is tangible.

In certain places the development of the natural sciences and their introduction into the programmes of primary instruction are bitterly combatted, because they are accused of being irreligious. Herbert Spencer has perfectly answered this objection. "Far from science being irreligious," he says, "it is the abandonment of science that is irreligious. Let us make an humble comparison. Let us suppose an author whom we should salute every day with praises expressed in pompous style. Let us suppose that the wisdom, grandeur and beauty of his works are the constant subject of the praises addressed to him. Let us suppose that those who praise his works have never seen even

the cover of them, have never read them, never even tried to comprehend them; of what value would their praises be? And yet, if we may be permitted to compare small things with great, let us see how humanity has generally conducted itself toward the universe and its great cause. It is not science, then, but indifference to science, that is irreligious."

Intuitive teaching can only be considered immoral by those who look upon morality as a mass of traditional prescriptions to be inculcated upon children by the aid of formulas which they are taught to learn by heart. It is thought that moral culture, which is the essential part of general education, consists in preaching sermons and saying catechisms."

The field for the culture of morality is consequently the family and the schools. It is obtained by observing a discipline that is conformable to nature. By developing good feelings inculcated early, by inspiring sincerity, by forming upright hearts and characters, by showing that in all circumstances labor is the law of humanity, by transforming the school into a little society in which reign truth and justice, we form moral beings much more easily than by telling them stories called moral stories, and by discourses upon virtue and vice.

"The intuition of morality," says M. Guillaume, "is the knowledge of duty. Now duty is not the result of theories. It is derived as little from ethics as digestion is derived from physiology. Theory, true or false, plays but a subaltern part in it. It exercises control for the acquiescence of the intellect over the will already fixed without it. But the practice of duty which is the result of action that has become habit, alone has importance for the ends of education."

Faith in the supernatural has been in all times the greatest obstacle to social progress. The school of the people was not made to preserve the chains which have so long interfered with the blossoming out of the human intellect. A powerful scientific current bears us along. Free examination is the characteristic of modern civilization. In our society man has no longer to expect anything but from himself, from his own will, his own energy, his own intelligence. If we wish to preserve the conquests that are dear to us and constitute our glory, we must conform our system of education to the principles which rule modern society. Authoritative teaching, dogmatic, narrow and full of errors, prejudices and falsehoods, bequeathed to us by the scholasticism of the middle ages is to give place to *intuitive teaching* which develops the child in the integrity of his faculties and will prepare generations of intelligent, moral and free men.

FRENCH PEDAGOGY—OLD NEW. Contributions to the Historical Development of Systems, Institutions, and Methods of Education in France. Republished from the American Journal of Education. Henry Barnard, LL.D., Editor. Revised Edition, with Additions from Compayre and Buisson. Hartford. PART I: 640 pages, \$3.50.

CONTENTS.

Introduction	1-9
General Survey of the Field down to 1800,	9
Systems, Suggestions, and their Authors,.....	9-640
I. Inherited Pedagogical Ideas	9
1—Greece. 2—Alexandria. 3—Rome,.....	9
II. The Christian Element in Education	33-48
Teachings of Christ—Institutions of the Church,.....	33
Earliest Christian Schools—Monastic Institution,.....	41
Earliest Christian Schools in France—St. Columbanus,.....	45
III. St. Benedict, and the Benedictine Schools	49-119
Memoir—Monastery at Monte Cassino,.....	49
The Rule of a Holy Life—Influence on Modern Civilization,.....	65
Examples of Monastic Institutions, Schools and Teachers,.....	97
IV. Charlemagne and His Educational Work	113-148
Memoir—Alcuin—School of the Palace,.....	113
Schools of Lower and Higher Grade—Episcopal Seminaries,.....	121
V. The Universities of France	122-153
Characteristics of the Medieval University,.....	129
Historical Development in France,.....	145
VI. The Schools and University of Paris	153-304
Individual Teachers—Schools—Scholasticism,.....	153
Merging of Individual Schools into a Corporate Organization,	161
Earliest Statutes—Institution of Colleges, Halls, Commons,.....	169
Origin of Faculties—Devotional Duties—Manners—Landit,.....	168
Method of Instruction—Degrees—Ceremonies in Conferring,.....	173
Personal Figures—Students, Masters, Lecturers,.....	177
Religious Orders and the University,.....	189
VII. Teaching Orders and Congregations	200-221
1. Hieronymians,.....	211
Origin—Educational Work—Agricola, Reuchlin, Erasmus,.....	213
College de Montaigu at Paris—Influence on French Pedagogy, ...	218
2. The Society of Jesus and their Schools,.....	235-273
Ignatius Loyola and his Companions,.....	235
Constitution respecting Instruction—Edition of 1558,.....	271
Acquaviva—Ratio Studiorum,.....	241
Educational Institutions—Expulsion from France in 1785,.....	257
3. The Oratorians or Fathers of the Oratory of Jesus, 213-296	
Founder—Spirit of the Order—Studies—Methods—Discipline,...	273
4. The Port Royalists and their Schools,.....	295-300
5. The Christian Brothers,.....	301-331
6. Other Teaching Orders in France in 1780,.....	333-336

VIII. The Education of Princes.....	337-376
Importance Attached in the 18th Century.....	337
1. Louis XIV., and His Preceptors.....	339
Archbishop Perelre—La Mothe la Vayer.....	340
2. Bossuet and the Dauphin.....	343
Discipline—Recreations—Studies—History.....	345
3. Fenelon, and the Son of the Dauphin.....	339
Confidence, Love, and Obedience of Pupil Secured.....	354
Studies—Plan for 13th and 18th year.....	357
Letters of Fenelon to his Pupil.....	363
4. Condillae and the Prince of Parma.....	369
IX. The Education of Girls.....	377-464
1. Earliest Practice of the Christian Church.....	377
Letter of Jerome to Laeta—Early Examples.....	379
2. Vives, b 1493—d 1540.....	385
Education of the Christian Woman.....	393
3. Fenelon, b 1651—d 1713.....	399
Letter on the Education of a Daughter.....	409
4. Madame de Maintenon, b 1635—d 1719.....	401
School for Girls at St. Cyr.....	435
5. Vincent de Paul, b 1576—d 1660.....	433
Organization of Women for Charitable Work and Schools.....	439
6. Other Authorities—Rousseau—Madame de Genlis.....	463
X. Representatives of Differing Systems and Views.....	465-509
1. Rabelais, 1485—d 1553.....	480
2. Ramus, b 1515—d 1572.....	481
3. Montaigne, b 1533—d 1592.....	495
4. Descartes, b 1596—d 1650.....	513
5. Rollin, D'Aguessieu, Montesquieu.....	529
6. Diderot, Helvetius, Condorcet.....	541
7. Rousseau, b 1712—d 1778.....	545-599
Predecessors—Abbe de Saint Pierre.....	545
Analysis of Emile, by Raumer and Compayre.....	549
Disciples and Influence on Modern Pedagogy.....	577
XI. Laical and National Education.....	593-634
1. Antagonism to University and Church Monopoly of Education.....	593
2. Interference of Government—State Foundations.....	595
3. La Charlotais—President Holland—Montesquieu—Turgot.....	601
4. Abrogation of all Religious and Teaching Corporations.....	621
XII. Revolutionary Plans of National Organization.....	635-540
1. Mirabeau—Project of Reconstruction, 1790.....	635
2. Talleyrand—Report to Constitutional Assembly, 1791.....	637
3. Condorcet—Report to Legislative Assembly, 1792.....	639
4. Lakanal—Daunou—Fourcroy, 1793.....	639
5. Grand Ideas and Creations of the Revolutionary Period.....	635
Index to French Pedagogy.....	641

The above Revised Edition of Barnard's French Pedagogy will be put to press as soon as there is evidence that it is wanted. It is the most comprehensive and instructive treatise on the subject which has yet appeared in any language.

Principals of Normal Schools, College Professors of Normal Departments, and Chairs of Pedagogy, and all Educators and Teachers interested in the gradual development of existing systems and methods, can hasten the publication by addressing a postal order to the Editor.

UNIVERSITY EXAMINATION OF TEACHERS.

CAMBRIDGE SYNDICATE, 1880.

The first examination of teachers by either of the great English Universities in reference to certificate or degree was held in June last, as was announced in this Journal (p. 77) at the close of the Paper by Prof. Quick in the Cambridge Course of Lectures for Teachers. The following extracts are from an article by Prof. Quick in the *English Journal of Education* for November, 1880, giving the results of the examination with valuable suggestions as to the dangers to be avoided, and the best modes of conducting the same in future.

In this and in similar examinations (for this is by no means the first time teachers have been examined in England: the College of Preceptors has been examining for years) I have been much struck by the unanimity of the examiners. Though the subjects are totally different, and perhaps the methods of the examiners somewhat different also, their estimate of the candidates shows few discrepancies. This is so far satisfactory. It proves that the same people do well, and the same do ill, in different subjects and with different examiners. But, if I may state my individual opinion, I am by no means sure that the best candidates always do best in examination. There are two factors, so to speak, which are needed to produce success in such a case as this,—the first, intelligence; the second, special preparation. Within limits, these factors may vary inversely without endangering the result, but we know that a product vanishes when any factor equals zero, and this holds in the present case. A very stupid person may fail after careful preparation; and Lord Cairns or Professor Huxley would certainly be plucked if they tried to pass without reading anything on the subject. Of the two factors, perhaps special study is the more important for the examination, though intelligence is by far the more important for good teaching. These truths about the examination were not well understood by some of the candidates. Several of great intelligence, and I dare say of very considerable teaching powers, neglected special study to a point where success was endangered, and in some cases sacrificed. Of course one has a great dislike to plucking anyone who has a cultivated mind and is probably a good teacher; but one's business is to find out whether A and B know certain subjects, and if they don't one can't say they do, however high an estimate one may form of their general capacity.

The easiest questions that can be set are those which ask merely for reproduction,—mere book-work questions, as the Cambridge phrase is. A friendly critic complained of my paper as having too much book-work in it, and it is perhaps fairly open to this objection; but some questions are needed to test careful and accurate reading. A practice has got established with some examiners of testing careful study by asking about unimportant things—

“How many notes a sawbuck has,
And whether shawms have strings.”

The notion is, that if unimportant things are remembered, important things are sure to be known. But this kind of examining leads to false methods of studying. The true art of study consists in seizing on essentials, and attending to unessentials only so far as they are accessories needful as a background in a picture. But if unimportant things are “sure to be set,” they instantly become important to students preparing

for examination, and a reasonable view of the subject is thus rendered impossible. With this conviction, I set no book-work question that did not, in my estimation, turn on some point of interest or importance. The following (and one other) are the only questions of *pure* book-work:

1. What are the chief recommendations Luther gives the town council of Germany in his celebrated letter of 1524?

10. State some of Jacotot's Aphorisms.

14. On what ground did Arnold advocate introducing Natural Science into schools?

15. In speaking of the education of his own daughter, what does Arnold say about the intellectual education of girls?

Luther's letter ought to have been known, but it was not to 38 out of 42 candidates. It is to be found in English in Henry Bernard's "German Educational Reformers," and in German in most books on the History of Education. Jacotot's Aphorisms were much better known; indeed, only 5 candidates failed utterly in this question, or omitted it, and the average of the whole 42 was about half-marks. The two questions about Arnold referred to passages which I thought must have struck any intelligent reader of Stanley's *Life of Arnold*. Arnold was one of the first to propose teaching Natural Science in schools, and he gives as his reason that we ought to begin at school whatever it may be desirable to study in after life; for as adults we can continue a study, though we cannot start in one that is new to us. In the passage about the education of girls, Arnold insists on the importance of examinations, and regrets that for girls there was nothing like the degree examination at Oxford. As both the teaching of Natural Science and examination of women are now receiving so much attention, I should have thought that these passages in Stanley's *Arnold* would have been observed and remembered. I was therefore somewhat disappointed to find that only 12 of the 42 knew the passage about the education of girls, and only 3 gave me Arnold's reason for introducing Natural Science. As I said, the special subjects, Locke and Arnold, had not been properly studied. As Arnold was a special subject, we assumed that everyone would be familiar with Stanley's *Life of Arnold*; but as the book was not mentioned in the list sent out of books on the history of education (a list for which I was responsible), the students, many of them, thought they were not expected to read it.

In the questions I have mentioned, the factor thought of was special preparation. In the others I sought to give more or less play to the intelligence. But directly one asks for thought, one asks for what even able candidates cannot, as a rule, give one on the spot. As they cannot pay in coin (to use Addison's metaphor) they must write a check, *i. e.*, they must give proof of thought accumulated elsewhere. There are few who do not find it almost impossible to think against time in examination. The very best thinking often goes at a snail's pace, and, like the snail, shuts up altogether if we try to hurry it. So candidates naturally fall back on what they remember, and often come armed with convenient formula, which show that *somebody* has thought, but not the candidate. Those who were in for this examination, no doubt, considered themselves very unfortunate in not being able to get hold of many of these formula; but to judge from their use of those they did get hold of, I doubt if they would have been any better off with more. *E. g.*, I asked what advantage Froebel sought to secure for children by means of the Kindergarten; and about Froebel some of the candidates were provided with a formula. The consequence was that in answer to this question I was told that "Froebel sought to exercise the instincts, which were seven in number—activity, agriculture, transformation, curiosity, sociability, religion," and some other, I forget what, and have no wish to refresh my memory. And this list seemed to some candidates so well suited to "satisfy the examiner," that they managed to bring it in in dealing with some other questions. I must say I look forward with alarm to the time when candidates will present themselves furnished with a panoply of such

formulae, and will learn no more from the history of education than a schoolboy would learn by committing to memory the hard names pasted on the fossils in a geological museum. We should do well to remember how easily the study of the History may be injured by the thought of a coming examination. This thought indeed changes the attitude of the student's mind. He is tempted to think of what he reads no longer as the expression of truths which may affect his own views and practice in education, but as so much information to be got up by a particular day, and dropped again when it has served its turn. The friends of the examination (with whom I wish to be reckoned) maintain that it is better for teachers to have studied the History even for examination than not at all; but when hand-books are introduced, formulae settled, and studying the History means tagging to each distinguished name a list of words that are supposed to express just what the examiner will ask for, it will be at least doubtful whether we should go on examining in the History of Education.

As this question bears on an important point in the history of education, I should like to give some materials for the right answer. In learning anything there are two things to be considered—(1) the advantage we shall find from knowing that subject or having that skill, (2) the effect which the study of that subject or practising for that skill will have on the mind or the body. The two are obviously quite distinct, though it may be maintained that according to "the economy of Nature" they must practically coincide, *i. e.*, that in learning the most useful things we shall get the best training of mind and body. The utilitarian view of instruction is then that we should teach things in themselves useful, and either neglect the result on the mind and body of the learner or assume that it must be the right result in accordance with "the economy of Nature." Again, when the subjects are settled, the utilitarian thinks how the knowledge or skill may be most speedily acquired, and not how this or that method of acquisition will affect the faculties. Now Locke is often spoken of as the leader of the utilitarians. How far is the utilitarian view adopted by him? No doubt very much what he has written in the *Thoughts* under the head of "learning" seems utilitarian. He recommends the study of Latin just as he recommends the study of Law, because "he knows no place which a gentleman can well fill" without a knowledge of these subjects. And in the methods he prescribes he aims simply at pointing out the quickest route to the knowledge, and in language-teaching he is the precursor of the professedly utilitarian Hamilton. But on the other hand "learning" was not the whole of education with Locke, but, as he himself says, the last and least part. He thought children incapable of much intellectual training, so he laid the main stress of their education on the formation of habits. Industry was to be one of these habits, and study was to be encouraged to prevent "my young master" from "sauntering." Any study might serve this purpose, and therefore Locke chose useful studies, and in this he seems utilitarian; but at the same time he asserts that the studies the Governor should put his pupil on "are but as it were the exercise of his faculties, and employment of his time, etc." (*Thoughts*, § 94.) And when the age of childhood was past the "conduct of the understanding" was to be thought of before the acquisition of knowledge. He lays down as the object of studies "an increase of the powers and activity of the mind, not an enlargement of its possessions" (*Conduct of the Understanding*, § 19, *ad f.*). Such language as this entirely disqualifies the philosopher for the leadership of the utilitarians.

When I think of the time and study it has taken me to make this out, and of the time and care it takes me now to state it, I feel very indulgent to students who crave for formulae, and half suspect that I myself should be plucked if I went in for an examination without laying in a good stock of them.

I must hasten on and say less about the rest of the paper than I should like to say.

I tried to puzzle the lovers of phrases by asking the meaning of Montaigne's *Savoir par cœur n'est pas savoir*. To this question I only had four satisfactory answers, but this is nearly 1 in 10—not so bad, considering that of the people who quote the saying not 1 in 10 understands it.

It may gratify the Jesuits, in their present troubles in France and elsewhere, to know that they seem popular with English students. In the question about their school system only seven candidates failed, and most of the remaining thirty-five did very well.

I asked for an account of some English writer on education before the Great Rebellion. Now that an English University is examining in the history of education, our old writers will no doubt be rediscovered. A German has lately been writing on the only English schoolmaster of the olden time whose reputation has survived—Ascham; but to my mind Mulcaster is still more interesting, and Brinsley's *Ludus Literarius* is well worth reading. At present there is some difficulty, indeed great difficulty, in getting the entire books of Mulcaster and Brinsley, but large extracts are to be seen in Henry Barnard's *English Pedagogy—Second Series*.

I asked what objects Comenius sought to secure by means of his *Orbis Pictus*; but few candidates mentioned his chief object, which was to avoid what he calls "the unhappy divorce of words and things," and in giving the knowledge of words to give also the knowledge of the things to which they referred.

The answers about Rousseau's ideal boy of 12 and about Pestalozzi at Stanz were with a few exceptions satisfactory.

The "advanced questions" ought perhaps to have been called "subjects for essays," for I do not know that there is anything particularly advanced in them, at least in my share of them. The inquiry into the meaning of the Reformers when they insist that education should be "according to Nature" should not I think be put off to an advanced stage in the study of them, though no doubt it is so put off in many cases. The *School Guardian* tells us, "the Advanced Questions imply a great deal. Only daring theorists or practical teachers of some experience could have attempted them." If this is correct all the candidates must have been daring theorists or practical teachers of some experience, for they all attempted the Advanced Questions. But perhaps even Danton would not have considered "daring" the chief requisite for success in examination, and I cannot say that the bold attempt in all cases improved the position of the candidate. If I had to decide by the answers to my "advanced questions" only, I could not have passed half of those who were in for the examination. There was a choice between a question about Arnold and reforms in public schools, and a question about Nature, but only eight chose the Arnold.

Of the forty-two candidates twenty-seven passed our examination. Eighteen of these have received a certificate of Practical Efficiency. This was tested, I hear, by trial-lessons. I have not seen the Report of the Syndicate, so I know nothing of the examination further than I myself took part in it.

THE KINDERGARTEN IN NORMAL TRAINING.

Causes of Failure and Subsequent Success in the New York Normal College.

LETTER OF THOMAS HUNTER, PH. D., *President.*

Utterly disgusted with the barbarous system of restraint, ignorantly called "discipline," in vogue in some of the primary schools of the city, I had resolved, on the establishment of the Normal College, that our pupil-teachers should be trained to a higher and better knowledge of child nature. With this object in view I carefully studied the life, the labors, and the system of the immortal Froebel, and found in his Kindergarten the true foundation of all correct teaching—a deep, broad, natural foundation, capable of sustaining the most solid superstructure.

The key-note of the Kindergarten is the natural activity of the child, which is utilized for purposes of bodily, moral, and mental growth. The child needs physical exercise. Play is a necessity of its nature. The simple but profoundly philosophical mind of Froebel seized this necessity and turned it into a powerful instrument of culture. He adapted and gave to the world the celebrated games which are now amusing, developing, and instructing thousands of children all over the world.

Any one who has observed the habits of children can scarcely avoid the conclusion that man is born with an instinctive desire to destroy; and that "the natural state of man is war." Every parent realizes this to his cost. The child delights to pick things to pieces, to pluck up flowers, to break shrubs, to rob birds' nests, to smash the eggs, to quarrel, to fight, and to be, in fact, a most cruel little animal. It takes the constant vigilant care of a wise mother to check and cure these natural propensities. And hence, long before Froebel's time, lettered blocks and other agencies were employed to minister to the child's natural desire to construct and destroy. It may be worthy of notice that while the child seems pleased with the work of building his blocks into an imaginary house or church, his joy is unbounded and his laugh the loudest when he destroys the work of his own hands and beholds the little edifice a heap of ruins. Culture has done wonders in the vegetable kingdom, more certainly than it has done in the animal; for the reason, perhaps, that the former passively submits, while the latter actively resists. With all the barbarian races, as far back as history reaches, destructiveness has been their characteristic; and wherever man has become civilized he has become a builder. Constructiveness has been the visible sign of his civilization. Destructiveness is natural activity viciously exercised; constructiveness is natural activity cultivated and employed for beneficent purposes; and this truth is the basis of the Kindergarten, of the weaving, and making and building, and instructive amusements which will ere long work a great reform in professional teaching.

The common schools were established to conserve the state. This is the only logical reason for their existence. If the state could be con-

served without them, it has no more right to supply education than it has to supply paintings, statuary, or any other expensive luxury. If all people were wealthy a common school system would be unnecessary. But since the great majority are poor, and struggling for a bare subsistence, since the condition of orphanage and half-orphanage compels children at a very tender age to go forth into the world to fight for existence, since millions of parents are ignorant, or depraved, or selfish, and either will not or can not give their children an education, the state must save itself from destruction by maintaining a system of common schools. Charity schools or free schools will flourish in a monarchy where society is divided into castes, and where young people are taught "to order themselves lowly and reverently before their betters," but will not thrive in a republican atmosphere where there are no "betters"—at least before the law. In a republic the common school is a common necessity. But the common school is far from perfect. Teachers have long known and pointed out its imperfections, not for the purpose of injuring but of improving it. In doing this we have furnished the enemies of the system the very technical terms which enabled them to assail it, and which, but for us, they would never have known. Did the "citizen and tax-payer" ever reflect on what it costs to hang one of these neglected waifs? From the policeman to the prison, with all its wardens and keepers, through the court with its judges, prosecuting officers, and costly appliances, to the sheriff, who finally hurls the wretch into eternity, the cost is simply enormous; and the money, if expended on education, would give a collegiate education to a dozen orphans. In the ratio in which we multiply schools we diminish crime, which, after all, is the heaviest burden on the "citizen and tax-payer." We are aware that a snobbish Anglicised American, more fitted for the region of St. James than for the land of Jefferson, has asserted that the common school is the nursery of crime; but as he did not give one particle of proof, and as his articles were full of mistakes and redolent of Tory prejudices, we must still adhere to our statement, and insist upon the multiplication of schools as a mere matter of economy. But the schools, to be truly economical, must be thoroughly efficient. The system must be thoroughly graded, commencing with the Kindergarten and passing up to the high and normal school. This gives a head, trunk, limbs, and feet—a completely organized body.

Deeply impressed with the necessity of a Kindergarten in the "model school" connected with the Normal College, I requested the Committee in charge to employ an experienced Kindergarten, and to expend the necessary amount of money in the purchase of material. The request was granted, Froebel's games were procured, and Dr. Douai and his daughter employed. In justice to both it must be stated that they proved themselves excellent teachers, and that the subsequent failure was no fault of theirs. If Dr. Douai was to blame at all, it was because he did not insist upon the first essential requisite of success; he did not insist upon having children of the right age; or if he did insist, his insistence availed him nothing. His first step was fatal. *He began the Kindergarten with children seven, eight, nine, ten, and eleven years old.* Unfortunately the College was nearly half a mile from the "Model School"; so that I

found it difficult to give Dr. Donai that aid and support which he needed. The principal of the "Model School" had no faith in it and ridiculed the idea of "teaching children to play." She took special pains to inform the different members of the Committee on the College that the introduction and maintenance of the Kindergarten was a useless waste of the public money. It should be remembered that, at that time (1870), Froebel's system was comparatively new to America, and that its principles were but imperfectly comprehended, even by the majority of eminent teachers. Thus failed my first attempt to establish the Kindergarten.

Although I must, in justice, accept my fair share of the blame, the failure was not without its benefits. It was to me a profitable lesson. It showed me the proper conditions under which the Kindergarten could be made a success. These conditions are as follows:

1. An able and thoroughly trained Kindergartner.
2. A uniform class of children of the *average* age of four years.
3. A full supply of the requisite material.
4. A principal teacher in full sympathy with the Kindergarten.

An American, or at least a lady with whom English is the mother tongue, will succeed most easily among American children. A continental European may be abler and more experienced; but the slightest *accent* is an impediment, for one of the principal aims of the teacher is to cultivate language and harmony. The true Kindergartner should be able and willing to perform all the functions of a wise educated mother.

Accordingly when the "Model School," now the Training Department, was transferred in 1874 to the new building erected for its use, and connected with the College by a covered causeway, one of its critic teachers, thoroughly adapted by nature and education for the work, completely mastered the principles and practice of the Kindergarten under Mrs. Kraus, and having been promoted by the Committee to the position of Kindergartner, she subsequently introduced the system with the most satisfactory and gratifying results. Notwithstanding the fact that we use the Kindergarten as an experimental class for the pupil-teachers of the College, the demand for admission is so great that it is no exaggeration to say that we could form ten classes, had we the necessary accommodations.

The question naturally arises, what is the effect of the kindergarten instruction on the children when they reach the higher grades of the school? The effect has been tested by comparing them with children who have not had the benefits of the Kindergarten; and we have invariably found that the children trained in the Kindergarten are brighter, quicker, and more intelligent; and that especially in all school work, such as writing and drawing, requiring muscular power and flexibility in the wrist and fingers, they pre-eminently excel.

There should be a Kindergarten class in every primary school in the land. Of course the children's garden in which to perform their games, in great cities or towns, is out of the question. Children play in the basement, in the garret, in the nursery. How many children in New York play in a garden? The children in the primary schools can use

the play-ground and the class-room, and have ample accommodation for many of the practices of the Kindergarten.

One great benefit to be derived from the Kindergarten has not been sufficiently dwelt upon—one that should occupy the attention of the patriot and the political economist—and that is that *the principles and practice of the Kindergarten unconsciously create and foster a taste for mechanical trades*. In these days, when the great majority of young men seek the counting-house and the learned profession, in order to escape manual labor, it becomes a matter of great importance to extend a system of instruction which inculcates a love and respect for work and the working-man. All the little songs about the farmer, the cooper, the carpenter, etc., while cultivating the ear for harmony, insensibly lead the children to form a high opinion of all industrial occupations.

The poor, and especially the poor in great cities, most need the refining and ennobling influence of the Kindergarten. Among this class, the wisdom, the kindness, the care of an educated motherly teacher (i.e. the Kindergarten) could accomplish the greatest amount of good. She can mould them at the most plastic age, and thus prevent a great deal of future crime. But it is impossible to do justice to this part of the subject in a short article like the present.

The pupil-teachers of the Normal College learn through the Kindergarten a great deal of child nature which they could not otherwise learn; and although they find no Kindergarten classes in the public schools to teach, they enter upon their work with a loftier idea of their duties and responsibilities, and with a broader humanity for the errors and miseries of their fellow beings.

NOTE BY THE EDITOR.

The time will soon come, we trust, when the Kindergarten will have a Transition Class composed of children between the ages of five and seven years, and the Primary School will modify its classification and methods, so as to continue the work of development begun in the Kindergarten by further applications of Froebel's method.

In the State Normal School building in Baltimore, and under the supervision of Prof. M. A. Newell, the principal and state superintendent, a training class and Kindergarten was conducted by Miss Anna W. Barnard, a graduate of Miss Burritt in 1879-80. The four ladies who graduated in 1880 are now conducting Kindergartens in Baltimore and Washington. The success, both of the training class and the Kindergarten, was unquestioned, and the principle and methods of Froebel's system Prof. Newell holds in the highest estimation as the basis of all child culture and normal training; but the reduced appropriation for the support of the state Normal School prevented his continuing the work so auspiciously begun, mainly by private resources [donation by Mrs. Elizabeth Thompson].

A Training Class and Model Kindergarten have been established in the State Normal School at Oshkosh, in Wisconsin, in the State Normal School of Minnesota at Winona, and in the Oswego Training School, by Prof. Sheldon.

FREE KINDERGARTEN AND WORKINGMAN'S SCHOOL.

WORK-EDUCATION FOR THE WORKINGMAN.

Supported by the United Relief Works of the Society for Ethical Culture.

INTRODUCTION.

The Institution—of which the Free Kindergarten located (1881) at 1521 Broadway (corner of 45th street) is the first grade—was founded in 1878 by the New York Society for Ethical Culture, under the lead of Prof. Felix Adler, Ph. D., as a model of the instruction which can be and should be given to the children of the people—to enable them, when grown up to be men and women, to help themselves, and at the same time to give the dignity of intellectuality to labor, and to workingmen as a class. Prof. Adler, in a Discourse before the Society, in October 1880, and in a report as Director of the Institution, sets forth with great clearness the aims and methods of its founders, and from these documents (a well-printed pamphlet of fifty-eight pages,) we give the following statement.

THE INSTITUTION.

The workingman's School and Free Kindergarten form one institution. The children are admitted at the age of three to the Kindergarten. They are graduated from it at six, and enter the Workingman's School. They remain in the School till they are thirteen or fourteen years of age. Thereafter those who show decided ability receive higher technical instruction. For the others who leave the School proper and are sent to work, a series of evening classes will be opened, in which their industrial and general education will be continued in various directions. This graduate course of the Workingman's School is intended to extend up to the eighteenth or twenty-first year.

THE FREE KINDERGARTEN.

The characteristics of our Free Kindergarten may be briefly summarized as follows:

It is a *Kindergarten*. It has the merits which belong to the Kindergarten system generally. It is a *Free Kindergarten* for the poor, that is, it brings Kindergarten education to the poorest class, who are not able to pay for it themselves. It has the negative advantage of taking little children from the streets, where they would otherwise be exposed to bad companionship and pernicious influences of every kind. If it accomplished nothing more than this, our Kindergarten would be rendering no little service. But it has also the positive merit of placing the poor children under the best educational influence which modern times have devised. It is moreover the first step in a *rational system of education*. Kindergartens exist in great number. But a very large part of their benefits is lost because the rational method which they begin is not followed up in the later education of the child. That our Kindergarten is

connected with and followed by a Workingman's School, is one of its characteristics upon which I lay especial stress. Of other features of the Kindergarten, I mention the following:

It has a *Normal Class* attached to it. This was founded by and is in charge of the Principal. The lady pupils of the Normal Class receive instruction gratis in the theory and art of Kindergarten. In return, they devote their service for a year to the Kindergarten, and assist in its practical management. We have thus every year a corps of eight or nine Assistant-Kindergartners supplied to us by the Normal Class.

The Kindergarten has a *Ladies' Committee* directly concerned in the care of it. The ladies are members of the general Executive Committee, but they exercise especial watchfulness over the pupils of the Kindergarten. It is their duty to visit the home of every applicant for admission, in order that we may be sure that only the really poor are taken into our Institution, and we may thus be protected against imposture. The ladies also undertake at least one annual visitation of all the families connected with the Kindergarten, in order to foster healthful relations between the home and School.

Warm Luncheons are provided for the children daily in the Kindergarten. The little children often came to us hungry. We found it difficult to give them instruction on an empty stomach. A Free Kindergarten for the poor must look to the bodily wants of its pupils as well as to their minds. Garments and shoes are also distributed among the children by the Ladies' Committee, whenever cases of great destitution, such as often occur, are reported.

The results already achieved by our Kindergarten work are satisfactory. Children came to us who could not smile; some of them remained for weeks in the Kindergarten before they were seen to smile. In the Kindergarten these sad little faces were gradually changed. The children were taught how to play; they learned how to be joyous. The children came to us unclean in every way; in the Kindergarten they are made clean, and a neat appearance and habits of tidiness are insisted upon. The children's minds were awakened; their faculties—physical and intellectual—were developed. And here, of course, the degree of success achieved in each individual case varied with the natural ability of the pupils. Best of all, a powerful moral influence has been brought to bear on the children of the Kindergarten. Even the fact that they live in a little children's community, and are compelled to submit to the laws of that community, is important. Then, too, direct moral suasion is brought to bear upon the children by their teachers. The faults of each child are studied; obstinacy is checked, selfishness is put to the blush, and, by a firm, yet mild treatment, the character is improved.

THE WORKINGMAN'S SCHOOL.

The school, in which *work* will constitute an essential feature, not for its future productive value, but for its current educative influence, was opened in February, 1890, under the direction of G. Bamberger, a native of Hesse, and trained in the best methods, of which it is the aim of the founders to make this institution a model—"in which the entire system

of rational and liberal education for the children of the poorer class might be exhibited from beginning to end." The example, "having once been set, would not be without effect upon the common school system at large," which is thought by the projectors (in the light of an article in *Harpers' Magazine* for November, 1880), not to be altogether satisfactory, at least for those who are to get their living by the labor of their hands, or to discharge the duties of men and women in American society. Assisted by the munificent gift of \$10,000 from Mr. Joseph Seligman, the "United Relief Work" of the Society for Ethical Culture added to the Free Kindergarten, which had already attained to seven classes, the two lower classes of the Workingman's School—composed of twenty-five graduates of the Kindergarten. The Principal (Mr. Bamberger), in his first report at the Class of 1880, makes a statement, of which the following are paragraphs:

Our School is to consist of eight classes, of which two are now in operation. The scheme of studies will be found appended at the close of the report. It embraces four hours' instruction weekly in the use of tools, and to this I beg leave to call especial attention.

First, we begin industrial instruction at the very earliest age possible. Already in our Kindergarten, we lay the foundation for the system of work instruction that is to follow. In the School proper, then, we seek to bridge over the interval lying between the preparatory Kindergarten training and the specialized instruction of the technical school, utilizing the school age itself for the development of industrial ability. This, however, is only one characteristic feature of our institution. The other, and the capital one, is, that we seek to combine industrial instruction organically with the ordinary branches of instruction, thus using it, not only for the material purpose of creating skill, but also ideally as a factor of mind-education. To our knowledge, such an application of work-instruction has nowhere, as yet, been attempted, either abroad or in this country.

The softest wood is too hard for the delicate fingers of children seven years old, and, moreover, requires the use of heavy and sharp tools, such as are not willingly entrusted to little ones at so tender an age. We finally decided to use clay. Clay, after it has been prepared in a special way for this purpose, is easy to cut and to manipulate, does not stick to the tool, and is not brittle enough to break and crumble. This proved entirely successful.

A complete series of patterns had to be invented which might be worked by young pupils out of this material. Thirty such patterns have been produced, and in them we have the system of elementary industrial exercises, with which we begin.

[Not having the use of the illustrations we must omit in this place the description of the exercises.]

By means of a simple arrangement the school desks are converted into work-tables. Every child is supplied with a set of cheap and suitable tools. The work lessons occur in the afternoon on two days of the week, and last two hours each time. The pupils are obliged to behave as quietly during work as in the other school hours; only just so much whispering is permitted as is necessary for the requesting and rendering of necessary assistance. We endeavor to give the school-room the air of a well conducted workshop. Each pupil-workman has his own place and tools, for which he is held responsible so far as possible. All begin work simultaneously, and stop at the same moment. . . .

These exercises possess educational value in many different ways, and may be shown, as we have said in the beginning, to be in close connection with many branches of instruction, and with the collective education of the pupils. Instruction in drawing must of necessity go hand in hand with the modelling. What is drawn here is manufactured there, and *vice versa*.

Further, the rudiments of geometry are taught by means of this work far better than with the aid of mere diagrams. And a large number of definitions and propositions, which are commonly remembered by routine, are, by our method, demonstrated to the eye, and thus remain stamped on the mind forever.

Knowledge of arithmetic is also incidentally acquired. The children learn to cipher practically, to add and subtract, to read the figures on the scale, to divide and multiply them in the most various combinations.

Even certain of the facts of natural history may be taught in connection with the work. The children learn to know the material which they are handling; they study various kinds of wood, their properties, marks of recognition and adaptation. The teacher goes back to the tree out of which the wood has come, and explains the formation of the annual rings so easily perceptible to the children. They are taught from these how to determine the age, quality, and value of the wood. Forms of nature, also, are actually copied in wood, clay, and plaster, whenever such imitation is possible; and when it is not, recourse is had to drawing.

In this way we endeavor to make work-instruction contribute towards the general development of the child. The hand is educated by the mind, the mind by the hand.

What further advantages does the introduction of this species of work-instruction offer? A great moral advantage, besides the purely intellectual ones. The habit of working together, of living, as it were, together, exercises the best moral influence. At an age when they are most susceptible to educational influences, the children learn to live harmoniously in social groups, and become accustomed to mutual aid and support. No individual can place himself above another; all have similar duties, equal rights, equivalent claims. But, on the other hand, there is no false, artificial equality. The children are taught from the beginning the necessity of subordinating themselves to the more able and skillful, while, warned by their own failures, they learn to sympathize with the weak and helpless.

We endeavor to teach thoroughly, whatever branches are taught in our School at all. We teach reading according to the synthetic analytical method. The child does not spell, it reads phonetically, and what it has read in this manner, it writes; and what it has written it reads again, and understands. The reading of print is reserved for the second school year. Why should we begin by placing two difficulties, two alphabets, in the child's way? Why should children be taught to write, or rather draw, printed letters—characters which they never use, and which only serve to render the hand stiff and ungraceful?

In the study of geography we pursue the method that has proved successful in some of the best schools abroad. A very great number of men and women live in astonishing ignorance of their immediate vicinity. They may have learnt by rote to repeat the names of distant countries, the capital cities of those countries, the size of the population, the staple products, etc., but of real geographical knowledge they are destitute.

Our pupils are taught, in the first instance, how to make diagrams and maps of their own school-room, of the streets leading to their several houses, then of the city and its adjacent territory, etc. They are thus led, in the study of geography, step by step, to practical acquaintance with what is unfamiliar to them by comparison with what is familiar. The progress is logical—from the near to the remote, from the known to the unknown.

In the teaching of history to these young children, we hold it essential that the teacher should be entirely independent of any text-book, and able to freely handle the vast material at his disposal, and to draw from it, as from an endless storehouse, with fixed and definite purpose. We attach even greater importance to the moral than to the intellectual significance of history. The benefits which the understanding, the memory, and the imagination derive from the study of history, are not small. But history, considered as a realm of actions, can be made especially fruitful of sound influence upon the active, moral side of human nature. The moral judgment is strengthened by a knowledge of the evolution of mankind in good and evil. The moral feelings are purified by the abhorrence of the vices of the past, and by the admiration of examples of greatness and virtue.

Instruction in the system of duties is a necessary element of all education, is, indeed, the keystone of the whole arch of education, without which any plan of studies must remain essentially incomplete. We propose to offer such instruction to our pupils, and thus, to the best of our ability, to round off the scheme of their education.

Prof. Adler, in the Discourse referred to in the opening paragraph, thus speaks of the design of the Workingman's School to diffuse sounder views than now prevail on the subject of equality and right.

A pauper class is beginning to grow up among us, incapable of permanently lifting themselves to better conditions by their own exertions, incapable of obtaining the satisfaction of their most natural desires, and only rendered the more dangerous and furious by the sense of equality with all others, with which our political institutions have inspired them. If the evil has not yet become so aggravated as it is in the Old World, let us utilize the time of respite which is given us by undertaking earnest and vigorous measures to check the evil's growth. And, of all these possible measures of prevention, a suitable, a sensible system of education is assuredly the most promising. Let us use what influence we have to correct the false idea of equality which is everywhere current around us. Let us teach the people the true meaning of the great principle of equality—namely, that all men are created equal in respect to certain fundamental *rights*, such as liberty, the protection of the person, and a right to the pursuit of happiness, but that there is by no means equality of natural fitness and endowment, and that the offices of life must always therefore be unequally divided. Let us impress upon the minds of the children that the business of life will always be carried on in a hierarchy of services, and that there is no shame in doing a lesser service in this hierarchy; that all honor accrues to us only in doing that function well to which we are committed, and taking pride and finding dignity in its performance. And to enable the working people of the future to take pride and find dignity in the work of their hands, is the object of the work education which we are seeking to introduce into our school.

KINDERGARTEN FOR NEGLECTED CHILDREN.

Address of Mrs. Sarah B. Cooper at the graduating exercises of the Pacific Kindergarten Training School, Tuesday evening, Sept. 14, 1880.

When the old king demanded of the Spartans fifty of their children as hostages, they replied, "We would prefer to give you a hundred of our most distinguished men." This was but a fair testimony to the everlasting value of the child to any commonwealth and to any age. The hope of the world lies in the children. The hope of San Francisco's future lies in the little children that throng her streets to-day. Is it a small question, then, "What shall we do with our children?" It seems to me that the very best work that can be done for the world is work with the children. We talk a vast deal about the work of reclamation and restoration, reformatory institutions, and the like, and all this is well, but far better is it to begin at the beginning. The best physicians are not those who follow disease alone, but those who, so far as possible, go ahead and prevent it. They seek to teach the community the laws of health—how not to get sick. We too often start out on the principle that actuated the medical tyro who was working might and main over a patient who was burning up with fever. When gently entreated to know what he was doing, he snappishly replied: "Doing? I'm trying to throw him into a fit. I don't know much about curing fevers, but I'm death on fits. Just let me get him into a fit, and I'll fetch him." It seems to me we often go on the same principle—we work harder in laying plans to redeem those who have fallen than to save others from falling. We seem to take it for granted that a certain condition of declension must be reached before we can work to advantage. I repeat again what I have often said before—we do not begin soon enough with the children. It seems to me that both Church and State have yet to learn the vast import of those matchless words of the great Teacher Himself, where He said, pointing to a little child: "He that receiveth him in My name, receiveth Me." He said it because, with Omniscient vision, He saw the wondrous folded-away possibilities imprisoned within the little child. Again the great and good Teacher said: "Take heed that ye despise not one of these little ones, for I say unto you that in Heaven their angels do always behold the face of my Father which is in Heaven." And when I see the neglected, sad-faced, prematurely-old, weary-eyed little ones in the pur-lieu of vice and crime, there is just one thought that comes like a ray of sunlight through these rifts of cloud, and it is this: There is not one of these uncombed, unwashed, untaught little pensioners of care that has not some kind angel heart that is pitying it in the heavens above. Parents may be harsh and brutal, communities may be cold and neglectful, but angels must regard them with eyes luminous with tender pity.

What shall we do with these children? Good people everywhere should combine to care for them and teach them. Churches should make it an important part of their work to look after them. The State should look after them. The law of self-preservation, if no higher law, demands that they should be looked after. How shall they be looked after? We answer, by multiplying free Kindergartens in every destitute part of the city. With fifty or sixty free Kindergartens established in the most neglected districts, San Francisco would be a different city ten years hence. Said a wealthy tax-payer to me, in response to an appeal for a subscription to our Jackson-street work: "I give you this most gladly. I consider it an investment for my children. I would rather give five dollars a month to educate these children than to have my own taxed ten times the amount by and by to sustain prisons and penitentiaries." This was the practical view of a practical business man—a man of wise forethought and of generous impulses.

The School Board of this city are entitled to the grateful consideration

of every thoughtful citizen for their action in accepting the class of five-year-old children at 116 Jackson street, as an experimental Kindergarten, connected with the Public School Department. Let anybody go and examine the work for themselves. It is a sad fact that between forty and fifty just such needy children have been turned back into the street, to learn all its vice and crime, who could not find accommodation in the Silver-street Kindergarten. I tell you this is a fact of momentous import to this community. Remember that from a single neglected child in a wealthy county in the State of New York, there has come a notorious stock of criminals, vagabonds, and paupers, imperiling every dollar's worth of property, and every individual in the community. Not less than one thousand two hundred persons have been traced as the lineage of six children, who were born of this one perverted and depraved woman, who was once a pure, sweet, dimpled little child, and who, with proper influences thrown about her, at a tender age, might have given to the world twelve hundred progeny who would have blest their day and generation. Look at the tremendous fact involved! In neglecting to train this one child to ways of virtue and well-doing, the descendants of the respectable neighbors of that child have been compelled to endure the depredations, and support in alms-houses and prisons scores of her descendants for six generations. If the citizens of San Francisco would protect the virtue of their children, their persons from murder, their property from theft, or their wealth from consuming tax to support paupers and criminals, they must provide a scheme of education that will not allow a single youth to escape its influence. And to effect the surest and best results these children must be reached just as early in life as possible. The whole effect of the Kindergarten system tends to prevent crime. And what estimate shall be placed upon an instrumentality which saves the child from becoming a criminal, and thus not only saves the State from care and expense incident to such reform, but also secures to the State all that which the life of a good citizen brings to it. Think of the vast difference in results had there been 1,200 useful, well equipped men and women at work in that county in New York, building it up in productive industries, instead of 1,200 paupers and criminals tearing down and despoiling the fair heritage! We have but to look at this significant fact to estimate the value of a single child to the commonwealth.

The true Kindergarten proceeds upon the principle asserted by Froebel, that every child is a child of Nature, a child of man, and a child of God, and that education can only fulfill its mission when it views the human being in this three-fold relation and takes each into account. In other words, the true Kindergarten regards with scrupulous care the physical, the intellectual, the moral. "You can not," says Froebel, "do heroic deeds in words, or by talking about them; but you can educate a child to self-activity and to well-doing, and through these to a faith which will not be dead." The child in the Kindergarten is not only *told* to be good, but inspired by help and sympathy to *be* good. The Kindergarten child is taught to manifest his love in deeds rather than words, and a child thus taught never knows lip-service, but is led forward to that higher form of service where his good works glorify the Father, thus proving Froebel's assertion to be true, where he says: "I have based my education on religion, and it must lead to religion." We seem to forget that the moral powers, like the physical and mental, can only be strengthened by exercise. What the world most needs to-day is to bring more of the true Sabbath into the week-day—in individual life, in family life, in social life, in business life, and in national life. The school should cultivate with equal skill the perceptive and the reflective faculties, the intellect, and the conscience. All training should tend to repress the lower nature and arouse the higher. It should regulate the animal forces so that they should minister to the spiritual, thus becoming the faithful servitors of all that is highest and noblest within the little child.

And this is the mission of every true Kindergarten. This is to be

your mission, my dear young ladies—you who go forth to practice and teach the principles of your Master Froebel. Like him, you must love the little ones whom you seek to unfold. Like him, you must wrap a warm heart of love about them, and love them into goodness. Are you ready for the work? It means much of toil and self-sacrifice; it means much of patience and care; it means much of weariness and discouragement; it means much of self-renunciation and self-conquest. One must be as patient as Penelope at her web, and as tender as true motherhood, to evoke the good and check the bad in these little neglected pensioners of poverty and want. There must be a magnetic attractiveness that charms while it compels. There must be a deep-sighted sympathy, which is wiser than all blame, and more potent than all reproof. There must be an abiding faith in the loving care of an Almighty Friend, in whose help and strength the patient toiler goes forward, day by day, feeling that, after all, the richest reward of such a life is to live it.

I wish every Christian philanthropist in the city would move toward the care and training of these luckless little children. I wish every church in San Francisco would establish and carry forward one free Kindergarten. There need then be no restraint in regard to foundation-work in moral and religious training—not necessarily sectarian training, but good, sound, fundamental Christian training. There could then be thousands of these little waifs under daily instruction; kept from the pernicious influences of the streets, and taught all that is good and true and pure and right and kind and noble. They could be taught industry and order and neatness. They could be taught reverence and self-respect. They could be taught in the midst of poverty and struggle to put their trust in a Heavenly Friend, who with unspeakable tenderness said: "Suffer the little children to come unto Me."

Could Christian philanthropy devise a better or more promising work than this? It reaches down to the very foundations upon which true character may be built. It is full of promise and fruition of hope and reward. It is a work that appeals to parentage. When fathers and mothers see the faces of their own darlings radiant with unalloyed happiness, would it not be well to turn a tender thought on these luckless little ones, left in the world with none to call them by dear names, and none to be thoughtful of their pressing wants, with nothing to relieve the sad monotony of the days and weeks and months of their spare and scanty lot. I have an idea that in proportion as we seek to bless these hapless children we may expect blessing upon our own. That in proportion as we give to these children we keep for our own. Verily, it is so.

"Then whispered the Angel of Mothers
To the giver, in tenderest tone,
'In blessing the children of others
You are garnering joys for your own.'"

THE CRY OF THE CHILDREN.

Do ye hear the children weeping, O my brothers,
Ere the sorrow comes with years?
They are leaning their young heads against their mother's,
And that cannot stop their tears.
The young lambs are bleating in the meadows,
The young birds are chirping in the nest,
The young fawns are playing with the shadows,
The young flowers are blowing toward the west,—
But the young, young children, O my brothers,
They are weeping bitterly!
They are weeping in the playtime of the others,
In the country of the free.—*Mrs. Elizabeth Barrett Browning.*

ANALOGIES OF TONE AND COLOR.

READ BY PROF. D. BATCHELOR, OF BOSTON, BEFORE THE AMERICAN FRÖBEL
UNION, MARCH 1879.

On the Use of Color in Teaching Children to Sing.

In our day there is a growing tendency to look at the arts and sciences in their relation one to another. The past age was mainly one of analysis, in which each seeker selected his own special study, and directed all his energies to find out the truth of that particular thing. In this way, a vast number of facts were observed, and underlying laws brought to light. The work is not by any means complete, and many earnest minds are still following up the separate paths of scientific discovery. But from the treasures already lying before them, some of our thinkers are now trying to deduce general principles, so as to arrive ultimately at the universal truth, of which all created things are but forms of expression.

It is everywhere seen that however complicated the details of any art may be, its fundamental laws are few and simple. The sculptor finds that beneath all the manifold changes of form, there can be but three ultimate principles; his surfaces must be either convex, concave, or plane. The musician may exhaust his ingenuity to produce the most varied musical effects; but all possible combinations fall back upon three tones, and these at last merge into one—the *key-tone* of music. The painter may revel in endless effects of shade, tint, and hue; but they are all based upon three primary colors, and indeed, many suppose these to be only different degrees of one—the primal red.

And not only do we find that the fundamental principles of each art are few and simple, but we also begin to perceive that a common relationship subsists between them—that the elements of one are mystically joined to all. No one art stands alone and separate from the rest, for each is allied to and dependent upon the others. Just as recent discoveries have shown that there is no clear boundary line between mineral, vegetable, and animal organizations, so if we look beneath the surface and study deeply into any art, we shall find it insensibly blending into the other arts.

This is especially the case with the kindred arts of music and painting. Probably there are not many persons among those who have given the subject a moment's attention but do somehow feel that there is a mystic relation between colors and tones. It is true that their ideas upon the subject are too vague and shadowy to be grasped in thought; but this is because they do not understand the relation of either tone or color to the mind. It is the writer's purpose to look into the matter a little more closely, to see whether this general consciousness is confirmed by systematic observation.

And first we will turn our attention to the effect which musical tones produce upon the mind. Music has been well defined as the language of emotion; but the knowledge of how and why it appeals to the emotions has been hitherto confined to the few who were gifted with rare musical insight, and even in their case, it is doubtful if it has not been more a matter of intuition than of understanding. The ordinary teaching of this emotional language has been entirely empirical, being, in its earlier and more important stages, a stereotyped routine of mechanical drilling, about equally wearisome and unprofitable. The philosophic method of instruction would be to find out the central fact or root-principle of music, and then, having implanted it in the student's mind, to let it develop itself naturally, taking on signs—i. e. notation—as it needed visible embodiment. Instead of a method like this, the student is set to study a complicated set of signs, which are nothing, after all, but the accidental surroundings of music.

A noble exception, however, to the general rule is to be found in the Tonic Sol-fa Method, which has been so successful in England. This system from the beginning and throughout clearly sets forth the fundamental principle of key-relationship;—i. e., the relation which each tone of the scale bears to its key-tone. The thorough application of this principle led to another very interesting discovery. In comparing these tones one with another, and observing how the composers used them in their works, the tonic sol-faists found that each tone had a distinct character, and produced an impression upon the mind peculiar to itself. Thus the key-tone gives the impression of firmness and strength. The ear is filled with it at the commencement; we want to hear it frequently in the course of the music, and if it did not come in at the close, the mind would be kept waiting in suspense for a more restful finish. This is the foundation tone of musical structure; but although it is essential to every tune, and lies firmly imbedded in the harmony, it does not necessarily arrest the attention of the listener. More often, like the strong foundations of a building which are buried out of sight, the tone produces an unconscious impression of strength and satisfaction. This strong tone, however, is quite noticeable in melodies of a bold character, e. g. :—



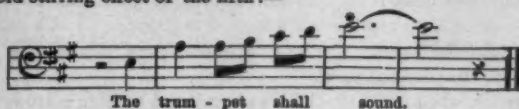
A cry breaks forth like thun - der roar.

And in the following example the tone happily expresses confident assurance :—



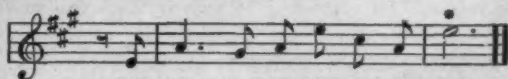
I know that my re - deem - er liv - eth.

The *fifth*, or Dominant, which is the first to respond to the call of the Tonic, is a clear ringing tone, and generally gives the impression of joyous activity. In this respect it is in marked contrast with the firm repose of the keytone. The following illustration from Handel shows the bold stirring effect of the fifth:—



The trum - pet shall sound.

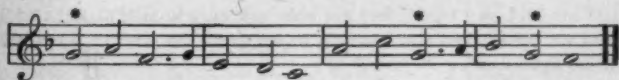
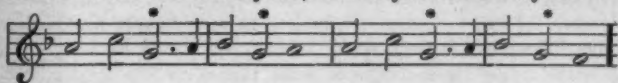
Or for a clear and sweet effect take this:—



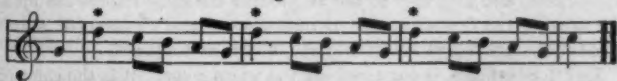
And like a sil - ver clar - ion rung!

The *third*, or Mediant, is of an altogether different type: it has neither the firm strength of the Tonic, nor the ringing clearness of the Dominant; but is distinguished by its steady calmness. Its peaceful effect is beautifully shown by Mendelssohn in his "*O rest in the Lord*," the spiritual restfulness of which is due largely to the prominence given to this tone.

These three tones form a harmonious combination, each supplying something which the others lack, and altogether making a perfect whole. They are the principal constituents of the scale, and serve as points of support upon which the other four tones may lean. But although these latter are dependent in their nature, each has a distinct character and produces its own impression. For instance, the *second* of the scale is of a hopeful or prayerful character, undecided in itself, but finding a sweet resolution upward into the third, or a strong resolution downward into the keytone, as in Pleyel's German Hymn:—



Here is the same tone in a higher and more excited strain:—



With shrill notes of an - ger, and mor - tal a - larms!

The *fourth* of the scale is an awe-inspiring tone, and takes a very prominent position in the solemn Dead March in *Saul*. It is well suited to express despondency or foreboding, e. g.:—



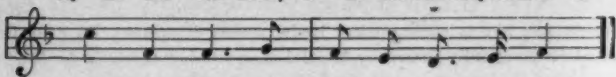
So in the last and dread - ful hour.

At the same time, it is capable of expressing grand outbursts of religious enthusiasm, and there are some fine passages of this nature in the Hallelujah Chorus. The natural resolution of this tone is downward, into the peaceful third.

The *sixth*, when taken slowly, is expressive of wailing sorrow, and it is the predominance of this tone which gives to slow minor music its peculiar sadness. Its effect may be seen in these two snatches of melody:—



By the sad sea waves, I lie - ten while they moan A la-



ment o'er graves of hope and pleas - ure gone.



Fare - well, ye lim - pid springs and streams, fare - well!

The *seventh* is a sharp piercing tone which often expresses eager desire, as in "*Angels ever bright and fair*" and in "*Waft her, angels*." The resolution of this tone is strongly upward, into the keytone.

These tonal effects can only be very imperfectly stated in words: they must be felt, to be understood. It must also be remembered that they only hold good when the tones are taken slowly, and in key-relationship. Then, too, they are subject to considerable modification from differences of pitch, speed, force, grouping and harmony. But notwithstanding these changes of mood, they never lose their individual character. This fact is kept constantly before the Tonic Sol-fa students, and as a result, they are able not only to sing at sight with great confidence, but also instantly to recognize the tones of a musical phrase upon hearing it.

Turning now to the colors of the prism, we see that they differ in appearance, and that they do not all produce the same impression upon the mind. The first difference of impression which we perceive is that some colors are suggestive of warmth, others of coldness.

Red, for instance, is *par excellence* the warm color. It is the color of blood and of fire; it reminds us of the ripened fruit, blushing under the sun's warm kiss, and it is likewise suggestive of the rosy cheek of health. Hence red is associated with the idea of warmth and strength.

This color has always been the chosen emblem of love;—especially

the beneficent love of the Heavenly Father, or that which most nearly resembles it,—maternal love. Conversely—for each color has its opposite signification—red expresses vital hatred or animal passion.

Blue, on the contrary, impresses us with an absence of warmth. Look at the cheeks and hands of a shivering child, and you will observe a blue tinge struggling with the natural red, which indicates a lack of vital warmth. Doubtless we have all experienced a chilling sensation upon the receipt of bad news, and we all know the vulgar idiom which describes such a check upon the vital energies as “a fit of the blues.” Similarly a lack of generous vital impulse is implied by the expressions “blue-stocking,” “blue-spectacles,” “blue-laws”, etc. Some such feeling as this must have actuated the barbarous people who stained the bodies of those whom they intended to offer as sacrifices with blue. We find also that the ancient Egyptians represented the disembodied soul as of this color.

Apart from human associations, blue impresses the mind with a sense of clearness and distance. It is the color of the atmosphere, and carries the vision away into boundless space; hence it is the emblematic color of eternity. Blue has always been regarded as bearing a relation to the intellectual side of human emotion. In sacred symbolism it is the emblem of Divine Truth.

Yellow is the medium between these extremes. It has neither the warmth and strength of red, nor the clear coldness of blue; but it forms the bond of union between the two opposites. Yellow is expressive of softness and gentleness, and when it deepens into golden, is emblematic of moral excellence; hence in mediæval paintings and illuminations, the saints are represented with a golden halo around their heads, and in the MSS. the name of God is inscribed in letters of gold. In its bad sense yellow signifies spiritual apostasy. Hence we find that at one time in some European countries, the Jews were obliged by law to wear a yellow badge, and Judas Iscariot is often represented as wearing a garment of that color. This reminds us that even to the present day English convicts who have attempted to make their escape enjoy the distinction of a yellow suit of clothes, and are popularly known as “canary-birds.”

Having proceeded thus far, let us review the ground over which we have passed. We have seen not only that music makes a general impression upon the mind, but that each tone of the scale differs in character from the others, and impresses us in a way peculiar to itself. We have seen also that the colors of the spectrum produce mental impressions, differing in kind one from another. It now becomes an interesting inquiry whether these tone and color impressions are of the same nature; and if so, where they coincide.

That the mental effects of the two things are similar may be argued from the almost universal consciousness of a hidden sympathy between them. We observe too that the technical terms of the one art are con-

stantly running into those of the other. Thus while the painter uses such expressions as tone and harmony in connection with his art, the musician constantly speaks of chromatic tones, color effects, light and shade, and so forth. This tendency to confound the art-terms has sometimes been condemned by purists; but it is a natural and almost necessary way of describing impressions which are so nearly alike in the mind. Indeed the more we turn our attention to this subject, the more evident becomes the analogy between tone and color.

Although we are not discussing the matter upon its physiological side, it is perhaps worth while to glance at a few points of agreement in this direction. Observe, then, that the tone and color scales resemble each other in their origin,—both being simply forms of motion. In the one case, the waves of motion fall upon the ear, through which channel they are conveyed to the brain, and mysteriously produce the sensation which we call sound; in the other, the exceedingly minute and rapid waves strike the eye, and being through that medium carried to the brain, cause the sensation of light or color. Further than this, Sir Isaac Newton himself pointed out that the relative length of the sound waves in the tone scale was exactly proportioned to the relative length of the light waves in the color scale. One striking point of difference is that whereas we can hear several octaves of tones, we cannot see one full octave of color, the eye stopping short at violet, instead of seeing through crimson to the higher red. But this discrepancy may be more apparent than real. It only proves that the ear has a more extended range of faculty than the eye. Now it is known that we can only see a small portion of the rays of the prism; far down below the deepest red extends a series of invisible rays, called thermal or heat rays; and far more the violet extend other invisible rays, whose presence is demonstrated by their chemical action. In this wide range there is room enough for several octaves of color. And in proof that the colors do not end abruptly at the point where they become invisible to the eye, it is well known that under favorable conditions we see a deeper shade of red and brighter tint of violet. Then there are some persons who claim that they are able to see not only crimson and a finer grade of red beyond the violet, but also a whole octave of color of exquisite fineness and beauty. If this ever comes to be substantiated by more delicate scientific methods it will establish another beautiful point of agreement between tone and color.

But passing by these physical analogies, we will consider the matter from a psychological point of view. And first we find that just as we distinguish out of the indefinite gradation of sounds a scale of seven distinct tones, so we are conscious of seven definite colors amid the blending hues of the spectrum; and if we take into account the intermediate hues, we find that they have their counterpart in the chromatic semitones.

Now let us compare the base of the spectrum, which is red, with the

first tone of the musical scale. We have seen that the mental impression which the key tone makes is that of firmness and strength. We saw also that the color red gave the impression of warmth and strength and so was allied to the most vital of our emotions—love and hate. It is worthy of note that while in music we have a constant tendency to fall back upon the key-tone for satisfaction, the poets in their word picturing use red—or colors which partake of red, such as rosy, crimson, purple, etc.,—far more frequently than blue or green. And in proof that this is based upon a natural instinct, we find on the one hand that as a rule very little children, and also savages, first distinguish and take delight in red color; while on the other hand, a tune to be really popular with the uneducated class of people, must be of a simple character, and must give special prominence to the key-tone. As good illustrations, we may refer to two songs, very different in character, and yet having this strong and popular element in common: the first is that famous German war-cry, "The Watch by the Rhine," and the other well known revival tune, "Hold the Fort."*

Surely enough has been said to show the emotional connection between Red, the foundation of the color scale, and Doh, the foundation tone of the sound scale. Both tone and color evidently make a strong appeal to our *vital* emotion.

Let us next compare blue with the fifth tone of the scale. It was seen that this tone had not the strength and restfulness of the key tone; but that it possessed considerable brightness and vigor. Its essential characteristic is a clear ringing effect, which often suggests the idea of going to, or coming from, a distance. Hence it is used by Handel in such passages as these, "The trumpet shall sound," "Their sound is gone out," "Arise, shine," etc. So much for the tone; now for the color. In blue we noticed an absence of that vital warmth which characterized the red. It is clear, and often gives the impression of being much farther off than it really is. This illusion is very effective in a picture, where some object stands in relief against a distant background of blue; or it is perhaps even more striking in a stained glass window, where a figure is set in a background of blue glass, which appears to retire and leave the form standing prominently forth. From the same cause the effect is incongruous when patches of transparent blue form part of the figure itself. Doubtless this effect of distance is due to the fact that blue is the color of the boundless firmament and that all distant objects have a bluish tinge.

Now here again is a close agreement between tone and color impressions. Each of these seems to provide a bright outlook for the mind, and to excite the imagination, which may be called the poetry of thought; we therefore regard them as motors of the intellectual emotions.

We have now to compare yellow with the third tone of the scale.

*The rhythmic movement is an important factor in popular tunes; but to speak of that here would carry us away from our present subject.

Remember that yellow or gold bears the signification of spiritual excellence. This is possibly largely due to the fact that the color is associated with the sun, which in the early ages was worshiped as the chief divinity among the hosts of heaven. Bear in mind also that the tone is of a calm, peaceful nature, and although it fails to give the strong satisfaction of the keytone, it produces a feeling of spiritual restfulness which makes it beautifully appropriate in such music as Mendelssohn's "O rest in the Lord," and "Consolation." Here once more we trace a sympathy between the tone and color, both of which appeal to our moral or religious emotions.

But now let us group these tones together, and compare the effect with that of the grouped colors. It is well known that the 1st, 3rd, and 5th of the scale sounded together produce perfect harmony; they constitute the fundamental chord upon which all the other chords depend. It is equally well known that red, yellow, and blue form an harmonious combination which is more used in decorative art than any other color grouping.

Again, if we place red (not scarlet) and blue together, the effect is not altogether pleasing. The colors agree perfectly, but we are left with a sense of something wanting. In like manner the keytone and its fifth when sounded together are perfectly concordant; and yet they produce a hard, bare effect, which is carefully avoided by musicians. But place yellow with the red and blue, or add the third of the scale to the other tones, and in each case a feeling of relief and pleasure is the result. This opens up an interesting psychological study. It reminds us that a person with developed vital and intellectual powers, but destitute of moral feeling, would hardly be a satisfactory bosom companion. At the best, it could only be a beautiful Undine before she had found her soul. Add the moral feeling, and we get a complete human nature.

One more analogy between the two groups may be noticed. In the chord we can double either the root or its fifth with advantage, as a reinforcement of the root adds to its strength, and an additional fifth imparts brightness; but a doubling of the third is generally unsatisfactory, too much sweetness without sufficient strength and crispness making the chord sound effeminate. A corresponding effect is seen in the colors. To produce the most pleasing effect, there must be more of red and blue than of yellow; if the latter color preponderates, the effect is somewhat sickly.

The foregoing analogies will suffice for our purpose. If we have succeeded in showing that a natural connection exists between the first, third, and fifth—the most prominent constituents—of these two scales, there is a strong presumption that the other colors and tones will also correspond. Further research tends to strengthen this belief, and we are at last brought to the conviction that the tone and color scales are but two modes of expressing one and the same great truth. This result is just what we might have expected, for all the discoveries of

science are leading to a grand centralization. Amid the endless variety of created things, there are unmistakable traces of a wondrous unity, and we are beginning to understand how at the foundation of all there is "one God, one law, one element."

But what is the practical outcome of this inquiry? Granting that the tones and colors do produce similar impressions upon the mind, can this fact be turned to account in the education of the children? Yes. Let the two things be made mutually interpreting. The eye and ear are the chief avenues through which the mind is impressed; of these, the eye takes in the wider range, but the ear is the more profound, and the tone impressions stir us most deeply. The fable of Orpheus making all things dance to the music of his lute embodies a truth. It is a childlike way of showing what a moving power lies in harmonious sounds. See how a concourse of people will listen with breathless attention to the tones of a sweet singer; or again how the tired soldiers on their forced marches will pluck up their drooping spirits and step forward with renewed energy as the strains of martial music fall upon their ears. See, too, how the practised orator can move the vast audience to laughter or to tears with the tones of his voice. And this suggests the remark that we are probably not aware how much our opinions of people are influenced by their manner of speaking. It has been noticed that the blind often form a truer estimate of a person's character than those who have the advantage of sight, because their sense of hearing is more highly developed, and they have learned to trust it implicitly. For the same reason, they probably have a more exquisite enjoyment of music than we can have. Our nearest approach to it is when we close our eyes and give ourselves up to the captivating influence of sweet sounds. We have dwelt at some length upon this point for the reason that it is so generally misunderstood. Because sight is the more obvious, and also is educated out of all proportion to the sense of hearing, we are apt to form an unworthy estimate of the latter, and to ignore its wonderful possibilities of improvement.

The sound impressions are deeper, and therefore more difficult to grasp, than the sight impressions. Children generally learn to distinguish between colors before they can catch and reproduce different tones of the scale. A visit to the Kindergarten will make this plain. There it will be found that while the color sense in the youngest children is well developed, the tone sense is very imperfect. Now if it were simply a question of later growth this early imperfection would not matter much; but the evil is that many people have to go through life with what is called "no ear for music," and all for want of early culture. Of a truth there is an urgent demand for better educational methods of ear-training.

The chief difficulty lies in the abstract nature of sound. Children learn the properties of things by seeing and handling them; but tones are neither visible nor tangible, therefore it is necessary to represent

them by signs or *notation*. But the ordinary symbols which are used to indicate tones are entirely arbitrary, having no natural relation to the thing symbolized. The notes on the staff, for instance, only vaguely indicate that one tone is higher or lower than another, but show nothing of its character. Dr. Lowell Mason found the written signs of music so devoid of suggestion as to the real character of the tones that he once expressed a wish that the children could be blindfolded while they were learning to sing the scale. Where the eye receives an impression at variance with the ear, this would certainly be an advantage; but a better plan would be to engage the eye in sympathy with the ear, i. e., to use symbols which would naturally suggest the thing symbolized. This has to some extent been done. Mr. Curwen, the founder of the Tonic Sol-Fa school of music, prepared a chart called the "Modulator," which shows exactly the position of the tones in the scale, and the relation of the different keys one to another. This is a great improvement upon the staff, with its complicated system of sharps and flats; but still it fails to represent the *mental effect* of the tones. Another advance was made when, in a happy moment of inspiration, Mr. Curwen conceived the idea of representing the tone-characters by hand signs. In this way, the strong effect of the *key-tone* is represented by the firmly closed hand; the hopeful *second*, by the up-turned hand; the peaceful *third*, by the open hand with palm downward, as if in pacification; the solemn *fourth* with its leaning tendency to the *third*, by the forefinger pointing downward; the clear open *fifth*, by the extended open hand turned sideways; the sorrowful *sixth*, by the hand drooping from the wrist; and the sharp aspiring *seventh*, by the forefinger pointing upward. The success which has attended the use of these simple manual signs has been very marked. By means of them any succession of tones can be sung by a large number of persons, at the will of the hand performer, and many a tune has been dictated and sung in this way. But however great their advantage as a means of instruction, or for social recreation, of course they cannot be used as a written notation.

It is here that we can make a practical application of the tone and color relations by using a color symbol to represent its related tone. Thus red stands for the keytone; orange for the second; yellow for the third, and so on through the scale. Even as arbitrary symbols they would have one great advantage over other arbitrary symbols, viz.:—that children take a natural delight in colors, and so their sympathies would be enlisted on behalf of this notation. But when we add to this the suggestiveness of the color symbols, their value will be recognized by all who are interested in educational methods.

We have now to say a few words about the working of this color-tone method in the Kindergarten. Not that this is to be considered by any means as a complete account of the children's musical exercises, for in that case considerable space would be required to explain the

subject of rhythm, which constitutes the chief part of their earlier training. We pass this subject, not as unimportant in its place, but as not essential to a proper understanding of tone and color relations.

In teaching the elements of tune, the children are led to listen to the keytone, its fifth and third; and to notice how very different they are in character, and yet how well they agree together. Next, upon any keytone being given, they will produce its fifth and third. After this is done readily, they are expected to tell the name of any one of these tones upon hearing it sung or played. To assist them in their study of the tones, the children have the hand-signs, and the sol-fa names, as used by the Tonic Sol-faists.

Their first association of tone and color is by means of the colored balls. It is very interesting to the children to discover that their familiar playthings have a new meaning. The red, yellow, and blue balls can be personified as robin, canary, and bluebird; and little musical games may be made up, so as to present the tones in many ways, thus constantly deepening their impression. The children are then taught to associate them with other objects of the same color, and afterwards to see them arranged in their order upon the color chart. In the rhythmic exercises which precede this, the comparative length of tones has been learnt in connection with lines or sticks of different lengths. Now we combine these two forms of notation, color and length, i. e.—we use *colored lines*, by which means time and tune can be represented in one symbol. When the tones have become familiar in connection with the color chart, the teacher with colored crayons writes down a fragment of melody upon the blackboard. First, the children go through with the rhythmic form, using a set of simple time-names for the purpose, then sing through the tones slowly, and lastly sing in correct time and tune, thus getting their first idea of the construction of melody. They are now provided with colored sticks or narrow strips of card, and upon a given rhythmic form set to invent a line of melody. Then "the concert" begins, in which each child in turn sings his own composition, the teacher sometimes pointing out a fault, or suggesting an improvement.

When the foundation is securely laid with these three tones, the dependent tones are introduced in their order, until the scale is complete. The mental effect of the tones is then studied more thoroughly, and the children—whose perceptive faculties are now more alive—constantly discover fresh characteristics in them. Of course various means have to be employed to give the tones a sort of personal reality. Of these, the children take most interest in what is called "The Musical Family." We have already discovered that some of the tones seem masculine while others by their comparative gentleness seem feminine, and we now decide that they shall be grouped into a family. The children have generally worked out the idea as follows:—Dox is the father; he is a strong, self-reliant man with a firm and full voice. Mm is the

mother, because she is so gentle and full of sympathy. SON, the eldest son, is a young man of joyous disposition, with a clear ringing voice. FAH is the younger brother, but not at all like SON, for he is of a serious disposition, and often has turns of gloomy despondency; though he sometimes gets roused into grand outbursts of religious enthusiasm. He is very fond of sacred music; but we like him best because he shows such a constant attachment to his mother ME. LAH, the eldest daughter, is often found in a sad, complaining mood, and shows more tendency to tears than to smiles; but she is apt at times to swing off into the opposite extreme of gaiety. There is considerable sympathy between her and her brother FAH; she lacks his intensity of character, but in his company generally shows to good advantage, being then full of sweet seriousness. The younger sister, RAY, is of a hopeful, confident nature, and it is beautiful to see with what tender affection she turns to her mother ME, or with what confident assurance she goes to her father DON. Let it not be supposed, however, that she has a weak or vacillating nature, for when the occasion calls for it, she can rouse us with terrible earnestness. There is one member of the family not yet introduced, and that is the baby TE (Si). The chief things that strike us about this little fellow are his shrill voice, and the habit he has of continually crying after his father DON. This baby is a great favorite.

By such methods as this the children learn to distinguish very readily between the different tones of the scale, and they soon gain the power of singing them at sight, as well as of recognizing them by ear. In their ear exercises they first learn to distinguish any one tone, then two or three tones in succession, and from that they are soon able to name all the tones in a line of melody which is sung to them. Their answers may be given either in the tone names, by the hand-signs, or, if they are able, by writing on the blackboard, while the others watch carefully for the chance of a mistake.

Their construction exercises in rhythm and melody now become more elaborate, and they are led to see the relation which one phrase should bear to another. After they can produce two lines which agree well together they may attempt four, and so make complete tunes. They receive help in this direction by each in turn standing out before the others, and dictating exercises with the hand-signs.

The introduction of harmony marks a distinct advance in musical education, and requires care on the part of the teacher. The children find the compound impression of hearing two tones together rather perplexing. The teacher prepares them to hold their own part side by side with another part by dividing them into two groups, and getting some to sing the tones which he indicates with his right hand, while others sing to his left hand-signs. He thus drills them upon strong fifths, sweet thirds, and tender sixths. Then a short and simple phrase is written down, with a second part below it; at first the teacher sings the second part while they sing the first; but afterwards they sing both parts themselves.

By this time, too, the staff notation may be introduced, and as soon as the symbols are explained the children will have no difficulty in singing from it. Just at first, it may be well to place colored notes upon the staff, especially to show how the key-tone changes its position; but as the symbols become more familiar, the colors may be dispensed with, for they will have accomplished their purpose. Yet it will be a good plan for some time longer to mark the key-tone in every key and transition by its color red.

This color-tone method has been in operation for about two years in one of the kindergartens, where children varying from 3 to 8 years of age have been trained with very satisfactory results. At the beginning a few of the children seemed to have no musical faculty, and in them it has been like the growth of a new sense. It is very interesting to follow them and see how they first gain the power to recognize a tone by its character, and then by degrees to produce it themselves.

The method is being used this year in all the free Kindergartens of Boston, but as yet the exercises have been almost entirely confined to rhythmic development. Upwards of eighty Kindergartners in this city are now being trained for the work. Training classes have also been held in Philadelphia, and the new method is being taught there.

In the course of this work, four things have become evident:—

1. The musical faculty is as capable of being trained as the mathematical or any other faculty. What is called "no ear for music" means simply a sluggish sense which needs quickening, and which may be educated to an unlimited extent.

2. The sense of time or rhythm manifests itself before the sense of tune, and consequently the earliest music lessons of children should be chiefly of a rhythmic nature.

3. Children very readily associate the ideas of tone and color. There can be no doubt about this. When the color method of teaching music was introduced into the Kindergarten, it was found that the children in their other occupations often substituted the name of the tone for that of the color. One lady was for a time troubled because her three-year-old child was continually running about the house and pointing out every red object as "doh." This apparent confusion of ideas, however, soon rights itself.

4. The sense of harmony is of much later growth than that of rhythm and melody. This may be seen in the musical history of the race. The rudest savage has some idea of rhythm which he tries to express by clapping his hands or beating on his drum while he performs his grotesque dance. Sense of melody marks a higher order of growth, for there is in it something of intellectual refinement. But the introduction of harmony is of comparatively recent date, even in the most highly civilized countries. This fact alone should teach us that it ought not to be prematurely forced upon the children. Let them for the present work out their ideas of rhythm and melody, and in due time their minds will grasp and understand the complicated impressions of harmony.

THE KINDERGARTEN PRINCIPLE IN INFANT SCHOOLS.

BY MISS MARY J. LYSCHINSKA.

SUGGESTIONS PRIMARILY FOR ENGLAND, BUT SOUND EVERYWHERE.

Much of the educational work attempted in the English infant school is provided for, theoretically at least, in our primary schools—the lowest grade of our city public schools; but the work is not begun so early or followed out so systematically as in English infant schools modeled after those of the Home and Colonial Infant School Society. The difficulties in the way of introducing the fundamental principle of natural development into the infant schools of England, arises from the impatience of parents, as well as the requisitions of the Code, for results which can be seen in actual attainments of book knowledge and measured by official examinations. Neither the infant school, or Kindergarten, is regarded in reference to its own nature and functions, but in reference to the children making more rapid progress in certain studies which are attended to further on. The proper treatment of children between the ages of 3 and 7 years requires more individual attention than can be given to large masses, or by teachers not specially trained in Kindergarten occupations, and with certain refinement of feeling. There is a strong tendency, as well as great temptation to a class of parents, to develop early the productive activities of their children, and to show off their proficiency in this and other directions. The innate modesty of children should not be prematurely brushed away. On all these points the suggestions of Miss Lyschinska, who has rare opportunities of studying these phases of child culture, as Superintendent of Method in Infant Schools under the School Board of London, and in the Kindergarten of Madame Schrader of Berlin, are of great value.—*Editor.*

It has been justly a boast with the Germans that they, more than any other European nation, recognized Pestalozzi's efforts in the direction of a psychological basis for the beginning of instruction, and in considering education as a branch of statesmanship. The political and social circumstances of the time were peculiarly favorable to the reception of a new, creative principle in education. Geographically and politically Germany was a name; she had sunk to the depths of national degradation. But as with individuals, so with nations—the moments of a crushing misfortune are often those most favorable to the birth of new spiritual truths. In his memorable "Addresses," Fichte's voice was heard like a trumpet-call throughout the land; he pointed to Pestalozzi as a saviour of the nations. From that hour the whole German scholastic world has become literally saturated with the principles of Pestalozzianism. So unreserved, so wholesale has been the adoption of the new educational life, that, from its extent alone, it must be reckoned with as a national feature by all those who would study the intellectual life of Germany. Since then another wave of educational thought has been slowly passing over Germany, proceeding from the original impetus given by Pestalozzi, yet with features sufficiently distinct to entitle it to a separate name. It has now reached our shores, and has been crystallized in the form of the "Kindergarten." The principle must, however, admit of a variety of adaptations; and it must, sooner or later, exert a greater influence than hitherto upon the co-existing institution of the infant school.

Meanwhile there seems to be one loophole of escape out of the difficulty, and that is the introduction of extraneous help—help not supplied in the usual way from elementary training colleges. Of course the weakness of such an experiment as that of introducing new auxiliaries into the routine of trained labor is evident, and consists in (1) the probable irregularity of such service, (2) the unskilled character of such help. If these arguments against voluntary aid are true generally, they hold good especially in the domain of school-keeping, where a little irregularity is sufficient to throw the whole educational machinery out of order. I am not, therefore, about to advocate the throwing open the floodgates for undisciplined energy to expend itself to the detriment of the children of the poor.

Suppose an infant school to be excepted from the ordinary conditions of examination, though still subject to inspection and receiving aid on satisfactory proof of efficiency, according to Kindergarten principles. It is surely not inconceivable that permission for such an experiment might be obtained, nor need the sacred rules of the Code be infringed to any perilous extent. The Head would be a person generally acquainted with the principles and practice of education (not merely those of instruction), and she should be especially versed in the principles underlying Kindergarten practices. She might be assisted by a staff of auxiliary, *but not unpaid*, workers. These would rank as and receive the pay of pupil teachers in their second year, and they should, if possible, be numerous enough to admit of an average of not more than 25 children to each class. Thus a small school of 100 children in average attendance would be worked by the head and four pupil-teachers (viz. one of the ordinary kind, so as to comply with the requirements of the code, and three auxiliaries), who should be completely under the control of the Head, being nominated for appointment or subject to removal by her; and she, in turn, should be directly and solely responsible to a sub-committee of the school board or other highest school authority. The pay of such extra pupil-teachers need not be high. There are many young people to whom the opportunity of instruction and practice in genuine Kindergarten work would be a consideration more valuable than money.

Mr. Meyers, an Inspector of one of the London Districts, observes in his Report for 1876:

"When I had charge of the Hackney district, I repeatedly visited a School Board School where almost all of the girls were the children of professional thieves. The mistress was a lady who resigned a good position as private governess out of desire for this missionary work. The result of her work, as seen in the contrast in expression, speech, and aspect, between the new arrivals and those who had enjoyed a year's schooling, was almost startling. I certainly felt that this lady had made a career which was entirely satisfactory, where every power that she possessed was finding its exercise in a direction, undoubtedly and without drawback, beneficent. In a career where the satisfaction derived from the work itself may be so sound and so pervading, the amusements of leisure become less important. . . . The great needs of Elementary Schools is an improvement of their teachers; a large accession of teachers who have the gentleness of life-long culture and the hereditary instinct of honour."

[The experience of St. Louis, under the wise and beneficent lead of Miss Blow, and Dr. Harris, is of great value in this connection.]

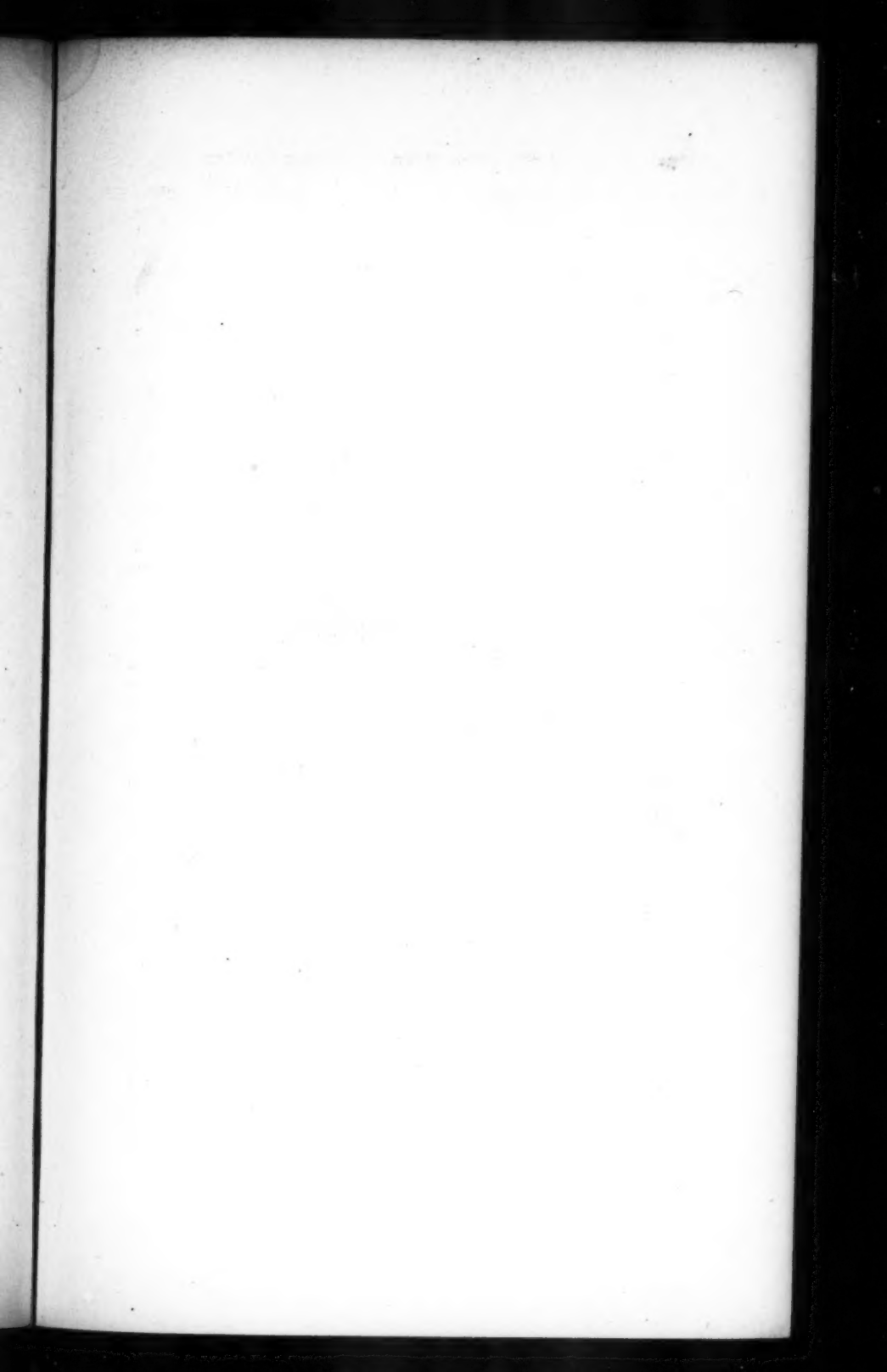
Our national system is not only covering all England with elementary schools, but it is also multiplying centres for the discussion and elucidation of questions relating to education. For the functions of school boards will be but half performed in the future if they limit their action to voting supplies and to setting a blind machinery in motion. As the mechanism may be expected to work with increasing smoothness, and with decreasing need for attention to the first elements of management, the higher work of school boards will consist in bringing a certain amount of educated thought to bear directly upon the problems of educational science.

Would it not be possible, even now, to allow more scope for the application of Pestalozzi-Froebelian principles within the operations of the Elementary Education Acts? Why should not school boards here and there set apart a few infant schools to begin with, for a certain term of years, for the especial purpose of applying the principles of the Kindergarten still more thoroughly to our national system? Why should not such experiments receive the sanction of Government, and be judged under special instructions to Inspectors to consider them in the light of the educational principles they involve rather than by the trick of "passes," already beginning to be found fallacious in gauging the ultimate worth of educational institutions?

In 1877 Mr. Scoltock, H. M. Inspector for the Birmingham district, spoke of the educational work in elementary schools generally in the following strain:—

... "It will be seen that the inspector and his assistants agree in thinking that the teaching has become mechanical rather than intelligent; that the school is valued rather by the number of 'passes' and largeness of the grant; that attempts are being made to reduce teaching to a dry matter of statistics, and to drive children in a hackneyed road, instead of developing their intelligence and gently guiding their faculties. Moreover, to teachers themselves this comparison of averages is most unfair. An idle and slippery master in a well-to-do neighborhood, if aided by clever assistants, may show glorious results without doing a hour's real work; whereas, in a neighborhood thronged by the careless and the vicious, another may work the very life out, and his results will show but a wretched percentage."

Under the London Board a staff is supplied at the rate of an average of 30 children to a pupil-teacher, and 60 to an assistant; but practically a pupil-teacher is expected to teach 40, and an assistant 70 infants. To people interested in the education question it must appear especially undesirable that children under six years should be educated in such masses; and although a State system can at the best offer but a poor substitute for the divinely-appointed means for the young child's education, the family, surely it would be well for the controllers of our national educational system to consider whether there is not some limit to legitimate divergence from the natural conditions of child-life. A teacher with from 60 to 70 children must, in self-defence, allow the least possible scope for individuality to assert itself; the *personal* links between children and teacher are weakened; the whole character of her intercourse with her children changes; uniformity, drill, a superficial order (the elements of which are almost entirely physical) must be maintained.





Caleb Mills.

EDUCATION—THE NEED OF THE SOUTH.

BY DEXTER A. HAWKINS, A. M.

INTRODUCTORY NOTE.

The following paper by Dexter A. Hawkins, A.M., of the New York bar, was read before the American Social Science Association at its annual meeting at Saratoga in September, 1877, and printed in the proceedings of that year. We transfer it to our pages, because the evils of unlettered suffrage still exist to an appalling degree in the States known as the South, and the remedies of the free common school established by each State, with the aid of the General Government, within the reach of every child, and the denial of the ballot henceforward to all who do not profit by its privileges, have not yet been applied.

THE NEED OF THE SOUTH.

One of the most beneficent problems that can engage our attention is the restoration of the Southern States to permanent peace and prosperity, as equal members of a great and free Democratic Republic, and the qualifying them for our system of government, and harmonizing them with it.

In order to effect this, without waste of time and of money, it is necessary, first, to diagnose their present condition; to look a little into its cause, so as to determine how far this condition is the result of social disease, and how far of injury; and to apply, in proper proportions, the wisdom of the physician to the disease, and the skill of the surgeon to the injury.

But, above all, we must bear in mind that it is the *vis medicatrix nature*, the healing power of time, supplemented simply by human action, that will work enduring restoration.

The social state, whether formed of equals or of castes, and whether thriving or growing poor, is of slow growth. Generations are required to effect a radical change in it for good, or for evil. Let us take for examination and illustration the nine cotton States: North Carolina, South Carolina, Florida, Georgia, Alabama, Mississippi, Louisiana, Texas, and Arkansas. They contain, according to the census of 1870, a population over ten years.

of age of a little more than five millions, of whom fifty-one per cent., or 2,555,751, *cannot read and write*! Their inhabitants over twenty-one years of age are 3,090,000; of these, fifty-one and one-quarter per cent., or 1,572,101, *cannot read and write*!

This state of things is the result of social disease of long standing, and calls for the aid of the physician, whose prescriptions must be wise laws and careful administration.

The assessed valuation for taxation of property, both real and personal, in these nine States in 1860, was \$3,244,239,406. This was reduced in 1870 to the sum of \$1,830,863,180. In other words, in the ten years including the Rebellion their taxable property had shrunk forty-three and one-quarter per cent. This shrinkage was the result partly of social disease, slavery; and partly of injury inflicted during the Rebellion, both by themselves and by us.

Their ability to raise money by taxation was thus in ten years reduced nearly one-half, while the immediate necessity that is upon them, in order to fit themselves for free government based upon universal suffrage, of changing nearly three millions of human cattle, late slaves, that formerly required nothing but food and the lash, into three millions of human beings, wielding the ballot and demanding education and protection, has temporarily nearly doubled the public burdens to be borne by taxation. Here is just where the surgeon's skill in the shape of pecuniary splints, plasters, and bandages, that is, financial help, is required.

This additional annual burden, to make intelligent human beings out of these late human cattle, must be borne, and be borne now. It cannot be thrown off and left for the next generation, without causing a social and political disease worse and more fatal to the nation than hospital gangrene to the wounded soldier, or scrofula to the individual. The dense ignorance of these three millions of full-fledged citizens either will be the death of free government, or it will generate a distorted and diseased form of it, worse for the nation than intelligent despotism.

We, as a nation, have just experienced a striking example of the danger of deferring or neglecting a great public moral duty.

A hundred years ago we were afflicted with a national malady, human slavery, that Washington, Jefferson, and Franklin, and all history, taught us must be uprooted, or it would strangle the Republic. We put off its extirpation for a century, and it cost us ten billions of money and a half million lives to repair our neglect.

Before prescribing a remedy for the misfortunes that exist in the Southern States, we must ask ourselves, "What is to-day the condition of society there; for what is feasible in one state of society may be wholly impracticable in another; what a homogeneous people may receive gladly, a heterogeneous one may reject utterly."

Their whole population is 6,887,475, of whom fifty-six and one-half per cent., or 3,896,320, are white, and were born under a system of caste that had of necessity to make might right, and to hold a white skin to be a sort of patent of nobility, a proof of hereditary right to rule. This fifty-six and one half per cent. cannot, so long as they live, help feeling that they still have, or ought to have, this right. We cannot expect them to feel otherwise; for, like ourselves, they are subject to the laws of habit and early training. We should feel and think as they do, had we been brought up and educated as they have.

Forty-three and one-half per cent. of the population, or 2,991,155, are colored, and came out of bondage; born to obey, not to think; to serve, not to rule.

All, both white and colored, grew up in a state of society that held manual labor degrading—the occupation of slaves; hence, the poor white, unable to own slaves himself, became a loafer and a hanger-on upon those who did own them; and the freedman's first idea of liberty was chronic idleness. The stimulus to industry and economy, that intelligence gives, was wanting.

Their politics and governments were in *name* democratic-republican, but in *fact* tyrannical and despotic oligarchies; and, however free in *theory*, were in *practice* intolerant and truculent. Ours would have been the same if we had been similarly situated. They were not to blame for this; it was a necessity of the social state of masters and slaves, from which they have now just emerged. The system of slavery, and the training of the whole body of inhabitants under it, both masters and slaves, was in perpetual and irreconcilable antagonism with any government based on equal civil rights of all inhabitants. That *training* remains, and must remain, till this generation passes away.

The five years' struggle of the Rebellion did not ameliorate the evils of this state of society; it rather intensified and embittered them. And it is not at all strange that, when peace was restored, the Southern whites, instead of giving their hands to the colored man, and asking him to buy some of their untilled acres, felt

more like giving him a kick, as, somehow, the cause of their misfortunes. In many localities they resolved that, come what may, they would not sell him an acre of their soil. Every attempt from the North to educate the freedmen was naturally looked upon, at first by the Southern whites, not as a philanthropic effort to transform those idle human cattle into intelligent, industrious, and productive human beings, but as a scheme of outsiders to transfer political power and office from the white race to the colored.

The Southern whites, from prejudice and wrong education, and the Southern blacks, from ignorance and inexperience, were unfit at the close of the civil war to rule a State where each human being has equal civil rights.

A difficult problem, then, was twelve years ago presented to the national Government. If it followed historical precedents, it would establish military rule in the Southern States until the inhabitants were qualified to govern themselves according to the declaration of human rights contained in the Preamble to the National Constitution. But this was contrary to the theory of our Government, that each State or territory should rule itself, and was distasteful to the great body of the nation. If it yielded to the wishes of intelligent Southerners, it would give them the sole power of reconstruction. But this would simply have rehabilitated the white oligarchy. If it followed the dictates of humanity and mere legal rights, it would have intrusted the restoration of the South only to the loyal inhabitants. But this would have confined it at first chiefly to the colored race, who, however well disposed, were utterly incompetent for the task, and would have wrecked the whole proceeding.

Every plan presented to President Lincoln had its difficulties; these were so manifest that he was unwilling to adopt any one method to the exclusion of all others. The only step that seemed clear, as a necessity in a free State, was to give the colored man the right of suffrage in order that he might protect himself with ballots instead of bullets. This was an act of beneficence to all, both white and colored. It was a guaranty of a final peaceful solution of the difficulty.

The objection to it was, it put into four millions of hands, wholly ignorant of its use, the most *powerful* and the most *destructive* weapon known to free governments, the ballot; and a weapon, too, which, once given, could never, without a revolution, be taken away.

Besides, in the late Slave States there were 317,281 adult whites who could not read the ballots they cast; and yet they (that is the male portion of them) possessed the right of suffrage. This unlettered white multitude were a large percentage of the voting white population; and the portion most dangerous to the freed-men; most given to mobs and murders.

In the Northern States, too, there were 411,399 adult illiterate whites, mostly foreign-born, it is true, but yet full-fledged voters. On the suppression of the Rebellion the color line disappeared from our Statute Books; and, on principle, the unlettered black had as good right to the ballot as the unlettered white, and would make no worse use of it. In fact, he is by nature much less given to violence than the white is, and more easily controlled. The right of suffrage was, therefore, conferred upon him.

Now, what temporarily followed in the cotton States? Just precisely what every student of history knew would follow the putting political power into unskilled hands, whether white or colored. The finances of these States were swamped; their industries, for the time being, deranged; public improvements stopped; public education neglected on the plea of poverty; and their elections a farce or a tragedy.

The three thousand unpunished political murders stated by a Southern member of Congress to have been committed there since civil government was restored to them, and the political slaughters at New Orleans, Coushatta, and Colfax, and the Chisholm massacre in Kemper Co., Miss., show that the tragedy is quite as frequent as the farce, though the actors in the former are whites, while in the latter they are more likely to be colored.

Some people think these States have done badly; a more just opinion is, they have done better, on the whole, than we had a right to expect. A complete social, industrial, and political transformation cannot be wrought in a people in a day; it takes an age, at least.

The result would have been similar, though more bloody, had the fifty-one and one quarter per cent. of illiterate voters been all white, instead of largely colored.

In 1793 France established the Republic and universal suffrage. But the majority of the voters, as in the Southern States, were illiterate; and the Republic, after shedding rivers of blood, became in seven years a military despotism. She repeated the experiment in 1848; but more than half the citizens then, though white, could not read the ballots they put into the electoral urns; and after

four years of experiment they chose, in 1852, a military despot by an enormous majority.

Spain has just gone through a similar farcical and tragical experience. Her unlettered white rabble in a few months gladly exchanged the republic of Castellar for the despotism of a Bourbon.

The Spanish Colonies in America fifty years ago founded half a score of republics, all based upon ignorant suffrage; they have enjoyed neither domestic peace nor prosperity since. Their normal condition is revolution; and will continue to be revolution, until either the ballot is restricted to the intelligent, or strong military governments, fitted for ignorant peoples, supplant the republics.

France, Spain, the Spanish American Republics—in fact, all countries where a large percentage of the adults are ignorant—must, in order to be peaceful and prosperous, have a strong government.

There must be a power guided by intelligence, outside of and above the ignorant mass, as long as this mass remains ignorant, capable of ruling and directing it.

Free Government and Ignorant Suffrage.

Free government and ignorant suffrage cannot long endure together. One or the other must go under. Like a ship at sea without master or navigator, free government in such connection founders in the first storm.

The late Emperor Napoleon, while President of France, published a book called "Napoleonic Ideas." The gist of it is, that democracy, with universal suffrage, necessarily and logically, to secure public order and prosperity, culminates in choosing an emperor or despot for life. From the standpoint of ignorant suffrage, like France in 1802 and in 1852, he was right. The Southern States are to-day in a state of mind leading to a similar act of political suicide if they find no other way of escaping the dangers and disasters of ignorant suffrage; hence the intimidation and practical disfranchisement of the freedmen.

Intelligent and conservative England extends the ballot, but extends education with it. A distinguished liberal, the Hon. W. E. Forster, said, in Parliament, to the radical wing of his party, "You demand universal suffrage; I demand universal education to go with it."

In republican Sparta, Lycurgus, two thousand seven hundred and fifty years ago, compelled the education of every citizen. In democratic Athens, Solon, two thousand four hundred and fifty

years ago, made the education of all citizens obligatory. In the so-called Holy Roman Empire in the eighth century Charlemagne required the children of all participating in the government to attend school, so that political power might be in cultivated hands.

In the simplest form of government, military despotism, the officers before obtaining commands undergo careful training and discipline, and are even then selected by an authority still more intelligent.

In China the educated alone carry on the government. Confucius and Mencius taught that system, and it seems to have been practiced long before their time. As a consequence, the Chinese have endured longer as an independent nation, govern a larger population, and sustain more human beings to the square mile, than any other people on the globe. The intelligence of a country must and will rule it, even if it requires a radical change of government to bring this about. It is a law of man's nature. Disaster follows the violation of this natural law.

In the face of these examples, could we expect the South, with universal suffrage, fifty-one per cent. of which cannot read, to be an exception to this heretofore universal rule, especially when the situation was not one of their own choosing?

Education and Productive Industry.

The illiterates, white and colored, in the Southern States, as in every other country, are not, as a body, of themselves and uncontrolled, capable of steady industry and economy. They eke out a subsistence, but add little or nothing to the permanent wealth and prosperity of their States. Their wants are few, and are simply and easily supplied; they are not provident and calculating, and are not urged on to wealth and higher civilization by the spurs of ambition.

Give them education, and their wants multiply as their ideas expand. They at once begin to take thought for the morrow, and are stimulated to labor and to save. Their stolid faces, their rude huts, their tattered garments, their lazy motions, all begin to brighten up and quicken. They take better care of their health, work to more advantage, demand better tools, and cultivate the soil or labor in the mechanic's shop with more success. Common laborers, with such an education as the free common school gives, are found by actual experiment to be worth to the State, as mere producing machines, on an average fifty per cent. more than if illiterate. In other words, the 3,000,000 of illiter-

ates in the South would, if they had a common school education, accomplish on the average fifty per cent. more of productive work per year than they now do. This would be equivalent, as a wealth-creating power, to adding a million and a half to the industrial population of the cotton States, and nothing to the cost of supporting them. Allowing a hundred dollars as the year's production of a laborer, it would add \$150,000,000 to the annual product of these States. Some of these States are now repudiating their State debts from alleged inability to pay them. Their whole amount is only some \$150,000,000. Were their laborers not illiterate, these very laborers could out of their earnings pay this entire debt in one year, and still have left for their support as much as they now consume.

Education reduces Pauperism and Crime.

The South is oppressed with pauperism and petty crimes. But these are the natural products of its illiteracy. In the three States of Pennsylvania, Ohio, and Illinois the illiterates furnish thirty times their proportionate share of paupers, and ten times their proportionate share of criminals. Illiterates in the whole country commit ten times their numerical proportion of crimes; in New England, fifty-three times. In the State of New York a single illiterate family, as is shown in a work just published by an eminent investigator, have become in less than a century the progenitors of twelve hundred paupers and criminals. Illiteracy is prolific of public burdens, and contributes little or nothing to the public wealth. Yet it is possible by education to reduce crime in this country ninety per cent. and pauperism ninety-six per cent.

The Grand Duchy of Baden by universal education in seven years reduced the number of crimes fifty-one per cent., and the number of paupers twenty-five per cent. The South, instead of multiplying crimes on her statute books and increasing the severity of their punishments, should multiply her free schools, and add to the rigor of her laws for compulsory attendance.

She has millions of acres of rich but unoccupied and unsalable land. The land in a State peopled by cultivated citizens is in demand at a high price, while in an illiterate community it can hardly be sold for the taxes. She invites immigration. But the current of immigration cannot be turned to States where fifty-one and a quarter per cent. of the adult population are illiterate, and where the education of children is not provided for at public ex-

pense. The industrious and prudent immigrant prefers the treeless plains and bleak winters of Nebraska, with her free common schools, to the tropical abundance of Louisiana, with her 92,105 ragged, idle, illiterate youth.

Conferring the suffrage upon the freedmen has, by a ten years' experiment on a large scale, demonstrated to the American people that a large percentage of ignorant voters in a State is radically destructive of good government and prosperity, both public and private. Hence the persistent and just demand of the Southern States to control their own affairs; and their efforts, however despotic, cruel and unjust to the freedmen, to destroy or neutralize the illiterate colored vote.

There are two remedies for the evils which oppress them. The one, partial and unjust, is to take away the suffrage from all the illiterates, both white and colored. But this is impracticable, and it would change the government to an oligarchy; besides, it would leave the root of the difficulty, illiteracy, like a cancer in their vitals, corrupting and consuming the life-blood of the States. The other, permanent and humane, is to establish and support throughout their borders the free common school within reach of every child, and require him to attend it, or to get an equivalent education elsewhere; and after a certain date, say ten years after the school is provided, admit no illiterate, either white or colored, to the right of suffrage.

This will cost money, but it will in one generation eradicate the evil of ignorant suffrage, insure the perpetuity of the republic, and put the Southern States on a basis of enduring and solid prosperity that can be attained in no other way. Till this is done a republic there, in the sense in which Jefferson understood it, is impossible. Like Rome under the Consuls, or like Venice under the Council of Ten, they may retain the name of free government, but not the substance.

Ignorant men in large bodies can only be ruled by intelligent force; and statesmen in all countries know it. To educate the people is the plain duty of the State, and one that is fast being recognized and fulfilled by all enlightened countries. *The property within a State is under obligation to educate the children, however poor, of every inhabitant.* This is a law of modern civilization. It is greatly to the advantage of the property-holders to recognize and carry into effect this law.

Republican Switzerland, imperial Germany, and monarchical

England are obeying this law, greatly to their domestic peace and profit. It removes from society one of its greatest dangers, namely, masses of ignorant, unreasoning, and prejudiced laborers. It adds from fifty to one hundred per cent to the productive power of a people in time of peace, and doubles its objective force in time of war. Pennsylvania has suffered more damage in one year from her 67,000 illiterate adult laborers than it would have cost her to have secured in the last ten years the education of every one of them. She will continue to be punished periodically by such outbreaks till, by compulsory education, she changes her ignorant and brutal coal and iron miners to intelligent and reasonable beings.

The valuation of the Southern States for taxation is about the same as that of the State of New York—in round numbers, \$2,000,000,000. They pay annually for free public education, in round numbers, \$7,000,000, while the State of New York pays \$12,000,000. In other words, they tax themselves for free public education only seven-twelfths as much as we tax ourselves. They are equal members of the Republic with us, possess equal rights and privileges, and it is not unreasonable in us to ask them to tax themselves as heavily for free schools as we do. This will enable them to increase their free educational facilities seventy per cent.; and when they have provided the schools they should be asked to make laws, as we have, requiring the children to attend them regularly for some definite and reasonable proportion of the year.

When this is accomplished they will still be giving their children only about one-third the advantages of education that we give ours, for their school population is 5,000,000, while that of the State of New York is only a little more than 1,500,000. They are now spending on the average only about one dollar and fifty cents per year on each child for free public instruction, while we expend eight dollars; and when they raise their annual expenditure to \$12,000,000, it will be only about two dollars and a half to each child of the school age.

DUTY OF THE WHOLE COUNTRY.

While they are doing this, what, as members of the same government, neighbors and well-wishers, is our duty to them? A large portion of their population is illiterate, and their assessed property chiefly real estate; hence they cannot collect money by taxation with the facility that we can. From the invention of the cotton gin to the year 1860 they ground out wealth from the face of the

ignorant colored man; and we, as manufacturers and merchants transacting their business, took a share of it.

Suppose, now, in some form we return to them a part of that wealth to enable them to educate these same colored men or their children. Their school funds were dissipated during the Rebellion. But all the States north and west of the Ohio have received a princely school fund from the general Government: namely, the proceeds of one section of land in each township, and since 1848 the proceeds of two sections. A large part of this land east of the Mississippi came as a free gift to the National Government in 1780 from the State of Virginia, and, happily, with a clause inserted in the gift by a member of Congress from Massachusetts requiring the devotion of a part of it to a school fund for the States to be created out of it. Let us from all parts of the Union urge our members of Congress and Senators to perfect, preserve, and perpetuate our free institutions and our capacity for self government, by enacting such laws, organic and statute, as shall secure for all future time to all children within the borders of each State the benefits at least of a good elementary education.

The new States were never at any time in so great need of educational help as the South is now; for they from their first settlement had an intelligent population, while it will require generations of free schools and millions of money to bring the Southern illiterates up to the level of the Western pioneers.

Public Land for Public Instruction.

The National Government receives from the sale of public lands from one to three millions a year. Let us appropriate this money for free common schools, and, say for ten years, distribute it to the respective States according to their population of illiterates, and require them to use it, under the supervision of the National Commissioner of Education, for free common schools, and to train teachers for these schools, both white and colored, according to the ratio of the two classes of illiterates. This would be putting the money emphatically where it would do the most good, and it would be paying back to the colored people some small part of the money that we, both North and South, have ground out of them; and, by lifting up the poor whites, compensate them in part for the damage resulting from slavery. It would do more to restore the South to enduring peace and prosperity than hundreds of millions spent there in levees and railroads, and other mere

material improvements, and more to protect and secure the rights of all classes of citizens there than the presence of the whole regular army of the United States. The Southern States contain 317,281 illiterate white adults, and 820,022 illiterate colored adults—a dead weight that threatens to sink both free government and prosperity there; and what sinks the South sinks us, for we are one national body, and no single member can be injured or benefited without in like manner affecting the whole body.

The Northern States would receive a just share of this money, for we have among us 411,399 illiterate adult whites, nearly all foreign-born, but yet, the males, endowed with the ballot, to the great peril of good government, and 34,463 illiterate colored adults, total 445,862; enough to carry nearly every contested election; an ignorant class, who supply nearly all our criminals and paupers. (See tables A, B, and C, below, for the number of illiterate adults, white and colored, in each State and Territory.)

A.

ILLITERACY ABOVE THE AGE OF 21 IN THE SOUTHERN STATES IN 1870.

	WHITE.	COLOR'D.	TOTAL.		WHITE.	COLOR'D.	TOTAL.
Alabama, . .	17,429	91,017	108,446	Missouri, . .	34,780	18,002	52,782
Arkansas, . .	18,610	23,661	37,291	N. Carolina, .	83,111	68,669	101,780
Delaware, . .	3,466	8,765	7,281	S. Carolina, .	12,490	70,830	83,320
Florida, . . .	3,876	16,806	20,682	Tennessee, . .	37,718	65,988	93,651
Georgia, . . .	21,869	100,551	122,450	Texas,	17,505	47,335	64,740
Kentucky, . .	43,826	37,889	81,715	Virginia, . . .	37,646	97,908	125,554
Louisiana, . .	12,048	76,612	88,660	W. Virginia, .	16,161	8,186	18,367
Maryland, . .	13,344	27,123	40,467				
Mississippi, .	9,387	80,810	90,197	TOTAL, . .	317,281	820,022	1,137,303

B.

ILLITERACY ABOVE THE AGE OF 21 IN THE NORTHERN STATES IN 1870.

	WHITE.	COLOR'D.	TOTAL.		WHITE.	COLOR'D.	TOTAL.
California, . .	12,872	468	13,330	Nevada,	474	15	489
Colorado, . .	2,305	63	2,368	N. Hampshire .	3,561	38	3,599
Connecticut, .	8,990	627	9,617	New Jersey, . .	14,515	2,881	17,396
Illinois, . . .	40,801	3,969	44,770	New York, . . .	73,208	3,912	77,120
Indiana, . . .	36,831	3,182	39,513	Ohio,	41,489	7,531	49,070
Iowa,	14,752	635	15,417	Oregon,	1,085	48	1,133
Kansas, . . .	5,994	2,772	8,766	Pennsylvania . .	61,260	5,758	67,108
Maine,	3,616	69	3,685	Rhode Island, .	5,922	291	6,213
Massachusetts .	30,920	822	31,742	Vermont,	6,867	45	6,912
Michigan, . . .	17,543	1,015	18,558	Wisconsin, . . .	17,667	185	17,822
Minnesota, . .	3,041	44	3,085				
Nebraska, . .	668	98	1,049	TOTAL, . .	411,399	34,463	445,862

C.

ILLITERATE ABOVE THE AGE OF 21 IN THE TERRITORIES IN 1870.

	WHITE.	COLOR'D.	TOTAL.		WHITE.	COLOR'D.	TOTAL.
Arizona, . . .	1,167	1	1,168	Utah,	1,187	8	1,145
Dakota, . . .	408	6	409	Washington,	487	16	452
Dist. of Col.,	1,214	7,599	8,813	Wyoming, .	326	33	359
Idaho,	315	4	319				
Montana, . .	899	34	433				
New Mexico,	14,892	68	14,960	TOTAL, . .	20,390	7,768	28,048

New York, with her 77,120; Pennsylvania, with her 67,108; Illinois, with her 44,770; Ohio, with, her 48,970; and Indiana, with her 39,513 illiterates, need more teachers and more schools, and less labor strikes, and would get a just proportion of this national bounty.

One of the highest duties imposed upon the National Government by the Constitution is, "To promote the general welfare, and secure the blessings of liberty to ourselves and our posterity." How can Congress do this more surely, economically, and safely than by appropriating the proceeds of the sales of the public lands to lifting the nation out of the depression, dangers, and difficulties, financial, political, and social, caused by having as a constituent part of our national body 1,600,000 illiterate adult citizens? That is a load no free government can long carry; it is a disease so wide-spread that, unless cured, it will certainly be fatal to liberty; and its only cure is the free common school. This is a question more vital to the interests of a free government than tariffs, banks, money, or politics. Compared with it they lie upon the surface, while this goes to the very root and marrow of the Republic.

The restoration of the Southern States to equal prosperity with the Northern, though it may be aided from without, yet it must spring from within themselves, and not from without; the *vis medicatrix nature* must be their own readiness and willingness in public education to march up abreast of the most enlightened nations of the nineteenth century, and keep step with them. This healing power must come, if it comes at all, through the education and training to industry and foresight of her ignorant and indolent masses. These States now have full opportunity to do whatever they wish to do and can do; and the rest of the country is willing to aid them in all right efforts. But neither they nor we should expect their restoration, that is, their regeneration, in

less than at least one generation. Ignorant suffrage can in that time be extirpated by laws so just to the individual as to deprive no one of a right he now possesses, and so preservative of free government as to admit no one to the right of suffrage, after a certain date, who has neglected to learn to read and write. Peace, prosperity, and genuine democratic republican freedom will then return to these States, and capital and immigration will no longer go two thousand miles west to find a home, but will seek to enjoy the mild climate and prolific soil of our Southern States.

The foregoing address was extensively republished in the winter of 1878 by the newspaper press of the Cotton States; and their editorials indicated its general approval.

In harmony with the suggestions therein contained, a bill was introduced into the last Congress to devote to public education the whole proceeds of the sales of the public lands, and to distribute the interest of the same for ten years to the States, according to the number of illiterate adults in each. It passed the Senate, but was not reached in the House.

It is to be hoped that the next Congress will make it a law. It would, in a few years, give this country a school fund of fifty millions of dollars, and, in one generation, a school fund of a hundred millions. The income of that, supplemented by state legislation and state taxes, would enable us to extirpate adult illiteracy and make every voter intelligent.

The late Rev. Dr. William Ellery Channing, in 1838, in his celebrated Franklin Lecture on self-culture, expressed himself as follows on the use of the proceeds of the sale of the public lands for public education:—

“There is another mode of advancing education in our whole country, to which I ask your particular attention. You are aware of the vast extent and value of the public lands of the Union. By annual sales of these, large amounts of money are brought into the national treasury, which are applied to the current expenses of the government. In this application there is no need. In truth, the country has received detriment from the excess of its resources. Now, I ask, why shall not the public lands be consecrated to the education of the people? This measure would secure at once what the country most needs, that is, able, accomplished, quickening teachers of the whole rising generation. The present poor remuneration of instructors is a dark omen, and the only real obstacle which the cause of education has to contend with. We need for our schools gifted men and women, worthy by their intelligence and their moral power, to be entrusted with a nation's youth; and to gain them, we must pay them liberally, as well as offer other proofs of the consideration in which we hold them. In the present state of the country, when as many paths of wealth and promotion are opened, superior men cannot be won to an office so responsible and laborious as that of teaching, without stronger inducements than are now offered, except in some of our large cities. The office

of instructor ought to rank and be recompensed as one of the most honorable in society; and I see not how this is to be done, at least in our day, without appropriating to it the public domain. This is the people's property, and the only part of their property which is likely to be soon devoted to the support of a high order of instructors for public education. This equal instruction to all classes, has peculiar claims on those where means of improvement are restricted by narrow circumstance.

"The mass of the people should devote themselves to it as one man, should toll for it with one soul. Mechanics, Farmers, Laborers! let the country echo with your united cry, 'the Public Lands for Education.' Send to the public councils men who will plead this cause with power. No party triumphs, no trades-unions, no association, can so contribute to elevate you as the measure now proposed. Nothing but a higher education can raise you in influence and true dignity. The resources of the public domain, wisely applied for successive generations to the culture of society, and of the individual, would create a new people, would awaken through this community intellectual and moral energies, such as the records of no country display, and as would command the respect and emulation of the world. In this grand object, the workingmen of all parties, and in all divisions of the land, should join with an enthusiasm not to be withstood. They should separate it from all narrow and local strifes. They should not suffer it to be mixed up with the schemes of politicians. In it, they and their children have an infinite stake. May they be true to themselves, to posterity, to their country, to freedom, and to the cause of mankind."

The census of 1880 shows we have a population of over fifty millions, of which 15,000,000 are of the school age, and 9,500,000 are actual attendants upon schools, taught by 273,686 school teachers.

What a magnificent standing army for a republic to sustain! And all fighting ignorance, and elevating and enlightening the people and fitting them the better to make their way in the world, not oppressing and enslaving them!

European nations exhaust themselves in feeding and clothing millions of soldiers, and providing them with the best arms and ammunition for destruction. We enrich ourselves in supporting and equipping with books and school apparatus nine and a half millions of school children, marshaled by more than a quarter of a million of instructors. Let us have more school money, and a conscription that will draft into the ranks of the army of learners the 5,500,000 that still remain outside of the school-rooms.

The possible average school period in the free public schools in this country is fourteen and one-half years, while in European countries it is, on an average, only eight years.

The effect of this upon our people is to make them, as a class, the most intelligent and productive laborers on the globe. They not only work to better advantage, but excel all others in the number and variety of their labor-saving inventions. They have, in ten years, from 1870 to 1880, as the census shows, doubled the food products of the country. In 1870 the grain crop was 1,387,299,158. In 1880 it was 2,716,836,495.

Though the tables are not fully made up for the other products of industry, yet the indications are that they have increased in like ratio. In six years we have sold a thousand million dollars' worth of products more than we have bought. Our extraordinary progress for the last ten years, while facilitated by our climate and soil, is yet largely due to the superior intelligence of the laborers. And we are all laborers of some kind.

This intelligence has been brought about by establishing and maintaining, in twenty-six of our thirty-eight states, the free public school within reach of every child, and, in a large part of these states, requiring children to attend for a certain number of years, unless taught elsewhere.

The prosperity, progress, industry, and wealth of each state, other things being equal, are almost in the direct ratio of the excellence of public education. A tour through Massachusetts and North Carolina, or Ohio and Louisiana, or Colorado and New Mexico, will show this to the most casual observer; an examination of their statistics from decade to decade demonstrates it.

The young people of the Southern States, who have come of age since slavery was abolished, are fully alive to the importance and necessity of the free common schools as a means of securing to their States the great prosperity to which their natural resources entitle them.

Generous men and Christian denominations are contributing money by millions to establish in those states universities, colleges, and academies. But they lack the broad support that comes only from a general diffusion of knowledge among the common people. These institutions of higher education do not reach the masses.

For the want of the free common school, like an all-pervading nursery in which to germinate the seeds and start the young plants, these institutions are obliged either to remain without students or lower their standards of admission.

The immediate need of the South for common schools is native teachers and normal schools in which teachers may be trained, and standard educational or pedagogic literature for these teachers to study.

The Rev. Dr. Mayo, who has just spent nine months as an educational missionary and public school apostle in the Southern States, says, that if every normal school, academy, college, and university there could be provided with a set (fifty volumes) of the educational works of Dr. Henry Barnard (the editor of this journal), it would be of inestimable benefit to both students and professors, in showing them how to do, in the most effective way, the great educational work that is now before them.

Cannot generous friends, at the North, of these institutions, be found who will provide money and send on the books?

D. A. H.

JUNE 24, 1881.

THE AMERICAN UNIVERSITY.

The Growth of the College.

COLUMBIA COLLEGE.

GRADUALLY the older American Colleges as they come into possession of larger resources, and a few recent universities (so-called) more richly endowed at the start — each on somewhat different lines, are aiming to provide the necessary facilities of higher culture for American young men and young women, who, heretofore, could only secure them by a residence, more or less prolonged, in some European capital or university town. These facilities will doubtless be increased and enlarged, and more and more widely enjoyed, as our preparatory schools are better equipped, and the smaller colleges restrict themselves to the work of secondary instruction. But in all probability we shall never have a university of the best American type, until we have a larger number of institutions, public or endowed, to do the work which the German Gymnasia, and the French Lycee and college, and the English public school and endowed grammar school, now do for their respective great High Schools; and added to this better preparation of students, our Universities must have within themselves a body of unattached instructors corresponding to the English private tutor, or the German *docent*.

The immense development of Columbia College in the last fifteen years, since the Trustees found themselves out of debt and in possession of larger resources, under the guidance of a wise educator, as narrated in the annual Report of the President for 1879-1880, is full of interest and instruction. A few more steps by the Trustees in the direction indicated by the President will place Columbia College, by whatever name it may be called, in a position to offer the facilities of a real American university to the young men and young women of the country, and there is no one measure so important as the establishment of a Superior Normal School and the gradual formation of a teaching body, from which the chairs of instruction may be filled. We need the German *Seminär*, or the French Superior Normal School.

AIM OF COLLEGE EDUCATION.*

There seems to be a singular confusion in the public mind as to what a college ought to do. The notion was distinct enough a century ago. It was then understood that the business of a college is not so much to teach as to train. It was held that the benefit to the student is not so much the knowledge he acquires, as the mental discipline he receives. In this view a well-stored mind is *per se* of little consequence; a well-developed mind is the main thing, though it be stored with rubbish. And in fact, when we consider the monstrous tasks of original Latin and Greek verse—nonsense and otherwise—with which the college lads of the earlier times had to wrestle, it would seem as if, in the eyes of the teachers of those days, rubbish had the preference.

Mental discipline, however, and not the acquisition of knowledge, having been the recognized and exclusive end of the early collegiate education, it followed, as a necessary and inevitable consequence, that the curriculum of study chosen for the purpose should be, as it was, extremely limited in range. It was made up almost wholly of Latin, Greek, and the pure mathematics. A little rhetoric, a little logic, a little astronomy, and later a little psychology, completed the circle. The last named subjects were only the efflorescence of the course, making their timid appearance in the final year. The earlier three years and all the preparatory course were absolutely solid with Latin, Greek and the pure mathematics.

In a certain sense, considering the object in view, this was wise; for as in physical training, neither strength of limb, nor skill of hand, nor command of muscular movement can be acquired except on the condition of often repeated and long continued practice of the same identical forms of exercise; so in education, no increase of mental vigor, no sharpening of the faculties, no facility of wielding to purpose the intellectual energies will be secured, unless the subjects employed to provoke the mind to exertion are so few as to make it certain that such exertion shall be steady and continuous. Therefore it is that the early educators were wise when they limited the curriculum to the narrow range represented by Latin, Greek, and the pure mathematics.

It may be said of them, indeed, that their wisdom in this matter was not a conscious wisdom, that the world at that earlier day had little else worth knowing except Latin, Greek, and the pure mathematics, and that they merely took what they found. If this is the case, they probably "bulldozed better than they knew."

But a greater wisdom has been claimed for them than that they limited the curriculum; it is that the subjects they placed in it are the very best, educationally considered, that could have been selected for their purpose; that Latin, Greek, and the pure mathematics are so infinitely superior to all other instrumentalities for exciting the intellectual activities, as to make them the sole necessary, perhaps the sole

* Report of President Barnard to Trustees of Columbia College for 1881.

fit, means for imparting to the growing mind a complete, symmetrical, and rounded development. If this is so again (and the question whether it is so or not can hardly be discussed with profit here) it is possible once more, considering the suggestion made above, that they were not so greatly wise as greatly fortunate. Whether wise or fortunate, or wise and fortunate, or not, however, they created a system very fit for the purpose in view, and a system to which we ought to go back—in form and principle, at least, if not in substance—if it is indeed true that we contemplate, or ought to contemplate, in our colleges of to-day, the identical object which they set before them in theirs.

In saying that we should adopt their system in form and principle, it is simply meant that we should return to a curriculum of two or three subjects; but whether these two or three should be Latin, Greek, and the pure mathematics, or French, German, and physics, or any other triad which may be selected from the copious *répertoire* of an American university of the present day, it is not intended to suggest.

But the question returns, is the object which we aim at to-day in our colleges the identical one contemplated in the colleges of the last century? Do we still design them to be merely mental gymnasia, and not schools for the acquisition of useful knowledge at all? If we do so, we have practically ruined them for the avowed purpose, by overloading them with so large and so distracting a variety of subjects as practically to eliminate the gymnastic feature altogether. The well known fact is that these subjects have been added, not on the ground that they improve the disciplinary efficacy of the course, which manifestly they do not, but for the reason, distinctly avowed, that they are subjects which educated men ought to know something about. If their advocates talk, as they sometimes do, of their disciplinary value, it is not because they attach importance to this view, but to soften opposition to their introduction. All of them, or most of them, at least, would have a disciplinary value, if opportunity were afforded to make it felt. But in the conflict of contending claims, it is hardly possible to secure the attention of the learner to any one for a period sufficiently long or sufficiently continuous to afford anything like a fair test of what, in this respect, it might be worth.

Age of Admission Fifty Years Ago.

When our colleges were first founded, there was nothing between them and the elementary schools, and the elementary schools themselves were very imperfect. The requisitions for admission were very humble, and their attendance was principally made up of lads of tender age. * *

Ogden Hoffman, one of our own distinguished alumni and a former member of this board, was graduated in 1812, at the early age of thirteen. The eminent physician and surgeon, T. Romeyn Beck, was graduated at Union College, in 1804, at the same age.

The senior member of this board, Samuel B. Ruggles (senior in the order of appointment), graduated at Yale College in 1814, at the age of fourteen. Benjamin Rush, chairman of the committee of the Penn-

sylvania State Provincial Conference (June, 1776) on the Declaration of Independence, and an eminent member of the medical profession, graduated at Princeton in 1760, also at fourteen.

Gulian C. Verplanck, famous in many ways, graduated at our College in 1801, at the age of fifteen, and made the day of his graduation memorable by an exciting scene in Trinity church, in which his indiscretion nearly lost him his degree. Our former professor of chemistry and physics, James Renwick; Richard Stockton, Senator from New Jersey in 1790; the Rt. Rev. Manton Eastburn, Bishop of Massachusetts; J. McPherson Berrien, of Georgia, and Nicholas Biddle of Pennsylvania, also graduated at the age of fifteen.

Governor and Chief Justice Hutchinson, of Massachusetts; Gouverneur Morris, of the Continental Congress; Aaron Burr, of unhappy memory; Chief Justice Joel Parker, of New Hampshire; Edward Holyoke, and John Thornton Kirkland, presidents of Harvard College; Nathan Lord, president of Dartmouth College; Samuel Provost, second chairman of this board; Joseph Reed and William B. Reed, of Pennsylvania; John Tyler, of Virginia; Joseph Hopkinson and John Sergeant, of Pennsylvania; Jonathan Dayton, of New Jersey; Professors J. W. Alexander and Henry Vethake; George Ticknor, of Boston, and the eminent surgeons, S. W. Dickson and A. C. Post, of this city, all graduated at sixteen.

Among graduates at the age of seventeen may be enumerated Cotton Mather and Increase Mather; Chief Justice James Winthrop; John Hancock, first signer of the Declaration of Independence; Governor Jonathan Trumbull; Edward Livingston; Jared Ingersoll; William Samuel Johnson, first president of Columbia College under the new charter; Richard Rush; James A. Bayard; James Blair Smith, first president of Union College; John Wheelock, second president of Dartmouth College; Jonathan Edwards, third president of the College of New Jersey; Timothy Dwight, president of Yale College; Sereno Edwards Dwight, president of Hamilton College; Francis Wayland, president of Brown University; Edward Everett, president of Harvard University; Henry Reed; DeWitt Clinton; Gouverneur Kemble; Henry Wheaton; Theodore Frelinghuysen; Emory Washburne; Benjamin Silliman; George Bancroft; J. Addison Alexander; John McVickar; and Charles Anthon.

Graduating at eighteen, we find John Caldwell Calhoun; James Kent; Robert R. Livingston, chancellor; John Wentworth, governor; John Cotton Smith, governor; James Otis; Timothy Pickering; Elbridge Gerry; Oliver Wolcott; Ambrose Spencer; William Cranch; Samuel Johnson, first president of King's College, now Columbia; Eliphalet Nott, president of Union College; Josiah Quincy, president of Harvard College; Jeremiah Day, president of Yale College; Jonathan Dickinson, president of the College of New Jersey; Horace Holley, president of Transylvania University; Isaac Ferris, chancellor of the University of the City of New York; William Ellery Channing;

Ralph Waldo Emerson; Henry W. Longfellow; Bishop John Henry Hobart; Bishop Benjamin T. Onderdonk, and Bishop Charles P. McIlvaine. It would be easy to extend this list.

It is true that, in the early period of which we are speaking, there were students in the colleges above the age of boyhood. They were there because there were no better schools. But the system both of education and of discipline had to be adapted to the prevailing character of the academic body, and that was determined by the predominance of the juvenile element. Students more advanced in years could, of course, accommodate themselves to this; but it would have been an unpardonable mistake as well as a perversion of the original design, to have attempted to accommodate the system to them. From this consideration resulted naturally the establishment of an invariable and strictly limited curriculum of study. * * With the progress of time, the extremely juvenile element has been eliminated from our colleges almost completely.

The average age of the student body in an American college of the present time is greater than it was a century ago, by about three years. The college of that day stands to the college of this, very nearly in the same relation as that which Eton College in England bears to the colleges of the University of Oxford. Eton and not Oxford was in fact the model on which our early colleges were constructed. That has remained substantially unchanged to the present time; ours have been so transformed that they have lost all resemblance to the original type. The average age of the Eton boys at the completion of their course is eighteen years, and they then go to Oxford. The average of applicants for admission to Harvard University, as reported by President Eliot, is also eighteen years.

Now it is certain that the educational system which is best adapted to the case of boys between fourteen and eighteen, cannot be equally beneficial for young men between seventeen and twenty-one. During the earlier period, the mind is plastic, and a uniform system which disregards native differences between individuals, and assumes that a perfectly equal and symmetrical development is practically possible in every case, is susceptible of being plausibly defended. But experience teaches the hard and unalterable fact that nature cannot be forced beyond a certain limit which time distinctly brings to view; that there are differences between minds as decided as those between faces; and that when, in the process of development, these have become distinctly pronounced, it is worse than a waste of energy to attempt to extinguish them by any process of educational forcing. A true theory of education, a wise plan of instruction, is one which first seeks to detect these differences, and then endeavors to adapt itself to them. Nothing is easier than their detection. There is no educator of any experience who will not, after a few months' careful observation, pronounce with the most unhesitating confidence that such or such a pupil will never be a mathematician, or that such or such another will never make a

linguist. It does not follow that he will say that these two ought not both to be exercised in both kinds of study. During the formative process uncongenial studies no doubt have their uses. But there comes a time when the formative process practically ceases, and then the kind of mental exercise which is educationally profitable will be found in the study of subjects that are congenial.

Development of Elective Studies.

From a comparison of catalogues, it appears that, fifteen years ago, when the system of graduate instruction at Harvard University was still in its infancy, the number of resident graduates was only nine, and the number of undergraduates three hundred and eighty-five. This latter number had remained stationary for the previous eight years, having been three hundred and eighty-one in 1857. During the year just past, the number of graduate students on the roll, most of them studying for higher degree, is fifty-one. The number of undergraduates is eight hundred and thirteen, having considerably more than doubled.

At Yale College, fifteen years ago, there were no resident graduates. The number of undergraduates was in that year four hundred and fifty-eight. This number was actually less than eight years previously, the total number of undergraduates at Yale in 1856-7 having been four hundred and seventy-two. The catalogue for the present year shows the number in the graduate course to be thirty-nine, and the total of undergraduates to have advanced to five hundred and eighty-one, a gain of more than twenty-five per cent.

At Princeton, fifteen years ago, there were no resident graduates, and the undergraduates numbered two hundred and forty-eight. This college had been for eight years stationary, having had two hundred and thirty-six undergraduates in 1857. During the year just closing, the number of the graduates under instruction at Princeton has been forty-eight, and the total on the undergraduate list four hundred and thirteen, an increase of one hundred and sixty-five, or sixty-seven per cent.

The growth of these institutions is the more remarkable from the fact that it is shared with scarcely any of their contemporaries. Bowdoin, Brown, the Wesleyan, Trinity, Middlebury, Union, Hamilton, Madison, and Rutgers are substantially where they were ten, fifteen, or twenty years ago. Williams had two hundred and twenty-four on her list in 1857, and has two hundred and six in 1880. Amherst alone has materially gained, her undergraduate attendance having increased since 1870 from two hundred and fifty-five to three hundred and forty-seven. But Amherst, since 1875, has established the elective system in the junior and senior classes, and has provided for giving advanced instruction to graduates.

The figures here presented require no comment. They prove more conclusively than any argument could do that just in proportion as provision is made in any educational institution for the wants of students of superior grade, in the same proportion its attractiveness is increased for those of the inferior.

COLUMBIA COLLEGE AS A UNIVERSITY.

BY F. A. P. BARNARD, S. T. D., LL. D.

DISTINCTION BETWEEN COLLEGE AND UNIVERSITY.*

In popular parlance, the words college and university are so indiscriminately applied, that it has become necessary to define the proper distinction between the two. Going back to the origin of the terms, we shall find that the university of the twelfth or thirteenth century was an educational institution established by decree of the supreme authorities of Church or State, and empowered to give instruction in the Liberal Arts, or in Law, Medicine, or Theology; and also to license such of its own proficient as should satisfy certain tests prescribed by itself to become instructors likewise. It was this licensing power which became the distinctive characteristic of the university. The license was originally bestowed only on those whose purpose it was to become teachers, in fact; and along with the license was imposed the duty of teaching in the university itself. The number of licentiates annually made was, accordingly, in the early history of the university system, very small; being only sufficient to maintain an effective corps of instructors. The numerical strength of this corps was not indeed rigorously fixed, as it is usually in American colleges. Instructors competed with each other in the same field, and their emoluments consisted mainly of the fees of their students. The number was, therefore, as great as under this system could obtain for themselves subsistence; but it necessarily reduced the annual number of licentiates far below that of the students annually completing their course of instruction in the university. The time came at length when licentiates were made without being rigorously required to exercise actually the functions they were licensed to perform. Then the license ceased to be a burden, and became an honorable distinction, becoming known as it is to this day as an academic degree. It does not appear that, during the prevalence of this system, any person not duly licensed by the universities was at liberty to give instruction in the liberal arts or in the studies preparatory to either of the so-called learned professions at all. Certainly no one without such authority might open a school for that purpose. It was a commendable feature of the system that it recognized the educational career as a profession, which was as carefully guarded from the intrusions of the ignorant or inexperienced as were the universally acknowledged professions of medicine, law, or theology.

The distinctive characteristic of the original university was, therefore, not the exercise of the teaching function, nor the nature of the subjects taught. Universities were sometimes established in a single

*Report of the President to the Trustees of Columbia College.

faculty only, as a Faculty of Theology or a Faculty of Law; but they were not universities because they taught Theology or Law or the Liberal Arts. Their distinctive characteristic was the power possessed by them exclusively to license teachers in all these departments of knowledge; and as these licenses came in time to be called degrees, it may be said at present, as in the mediæval period, that, in a technical sense, all that is necessary to make a university is the possession of the degree-conferring power. It follows that, as in bestowing charters on colleges, our American legislatures have invariably accompanied the concession with the power "to give and grant any such degree or degrees to the students of said college, or to any other person or persons by them thought worthy thereof, as are usually granted by universities or colleges now existing," all the more than four hundred chartered colleges of the United States, many of them differing only in name from schools for children of tender age, are equally clothed with university powers, and entitled to assume the honorable title of University.

The colleges, on the other hand, of England and the continent of Europe were originally established to provide for the lodging and subsistence of the university students, without being intended to exercise any educational function at all. They gradually took upon themselves such a function, by making it their business to ascertain, by daily or less frequent examination, how faithfully their inmates were profiting by the teachings of the university. By degrees, in England the colleges have arrogated to themselves all that is necessary to prepare the student to pass the examinations required to secure his degree; and it is entirely possible, and, more than that, is a thing of frequent occurrence, for a student to graduate at Oxford or Cambridge without attending on the course of instruction given by any university teachers at all. It is the university, however, which holds the test examinations and confers the degrees. The power of the college ends with recommending its candidates to the examining board.

But, in the popular idea of our own time, the relation between college and university is by no means such as is here indicated. The distinction between the classes of institutions so designated is understood to be one not of powers but of comprehensiveness. It is understood that while the teaching of the college is confined within a pretty sharply defined limit, the teaching of the university has no definite limit at all; that while the college teaches only some things, the fully appointed university teaches everything; also that an educational institution approaches the ideal of an university in proportion as it transcends the narrow boundary which is supposed to define the proper province of the college.

But the university not only carries on indefinitely the intellectual work which the college begins, but it also bridges over in a variety of directions the wide gap which exists between the ideal world, which is the world of the college, and the actual world of busy life. It has been

made a frequent reproach to the training given by the college, or to what is called a liberal education, that it is wholly impractical, and fails completely to fit a man for any career by which he may hope to gain his daily bread. Nay, it is even said that this kind of training not only fails to fit, but actually unfits men for the work of real life. It draws them gradually away into a world of abstractions, or of truths divested of all utilitarian associations (which it holds in contempt), so that when at last this species of culture has accomplished for them all that it can, they are even less well prepared to make their way in the world than they were before it began. To a certain extent, the imputation here thrown out is well founded; but it is not just on that account to regard it as a reproach. It would be truly a reproach, if it had ever been assumed for a liberal education that its object is to prepare men for the business of life. The object of liberal education is to make the most that can be made of man as man, not as lawyer or physician or carpenter. This being the avowed design, there is implied in it by necessary consequence that when the culture has done its work the man will not be prepared to enter directly upon any special career or vocation, but that he will be capable of adapting himself promptly to such a specialty, and of pursuing it afterwards with a vigor and success which could only be the result of such a previous preparation. In this respect it is with mental as with physical training. As the muscular exercises of the gymnasium do not result in fitting a man and are not intended to fit a man to use with dexterity the carpenter's plane or the stonemason's chisel or the pavior's rammer, but have the effect of solidifying the frame and hardening the muscles and exalting the power of endurance to such a degree as to make it possible for one who has undergone them to become, after a suitable subsequent apprenticeship, a more effective carpenter or mason or pavior than he could otherwise have been, so the mental discipline imparted by the course of instruction in the college, without fitting its subject to enter immediately upon any specific calling, prepares him nevertheless to fit himself for engaging in any chosen department of human activity with a probability of success on which he could not otherwise have been able to count. It is not, therefore, a reproach to collegiate education that it is not practical. It is only a mistake to suppose that it ought to be practical. And those who have assisted to overload the college curriculum with subjects thrust upon it on the ground of their practical utility have only helped to pervert its original and legitimate design, and, so far as they have succeeded, to detract from its efficiency and impair its usefulness. But the error is not only to assume that the education of the college ought to be practical, but, further, to forget that the education of the college is not, and is not intended to be, the completion of the education of the man. There are two stages in this education. The first is subjective; it is to draw out the capabilities of the man himself without reference to any use that is to be made of him, or that he may

make of himself. The second is to adapt the capabilities so developed to that special line of effort into which the work of the coming life is to be directed.

The college is not, therefore, in any proper sense a finishing school. It is a very common error to regard it as such. The youthful graduate is very commonly spoken of as having "completed his education." In a certain sense this is not wholly incorrect. His education is complete as individual man, but as social man it ought to be just about to begin. Those who forget that this supplementary education is yet to be accomplished commit an error which may draw after it serious consequences. This supplementary education in a large variety of forms it is the province of the university to furnish. It may not fulfill every demand of this nature which may be made upon it. If there are any who, after enjoying the benefit of a high intellectual culture, choose to apply the faculties so cultivated to mean and unintellectual pursuits, they will be obliged to find their supplementary education in the difficult school of experience, by serving a kind of preliminary apprenticeship to their selected calling. But to all those who purpose to fulfill the destiny which, in devoting the best years of their life to the acquisition of a liberal education, they have marked out for themselves, the university offers opportunities for passing from the ideal to the practical, from the general to the special, in many different directions; and thus speedily transforms the inexperienced thinker into the active and energetic worker. The university may therefore be described as a school of the professions; but it is more than that. If there are those who, without aiming at a professional career, feel an impulse urging them to devote themselves to the pursuit of truth, by research or investigation in any direction, the university provides them with the aids, the encouragement, and the instrumentalities for carrying out such a purpose also. Universities are therefore not merely schools of the professions, but they are at the same time the fountains and fosterers of the highest learning and the profoundest science of every kind.

It is true that all existing universities do not correspond to this description. The universities of England are not in any proper sense professional schools; and if it may be truly said of them that they foster learning, it has never been equally true that they are similarly propitious to science. They have produced some illustrious scientific men. Newton stands perhaps without a peer in the scientific annals of all time; yet the astronomy of Ptolemy continued to be taught in Newton's own University of Cambridge for a century after the publication of the *Principia* had created astronomical science anew. The universities of England have never made it their aim to open to educated men the way to any career of active life, unless it might be perhaps in the church or in the field of statesmanship. They have furnished in the past centuries almost exclusively, and they do in the present very largely, the rulers of Great Britain; and the clergy of the establish-

ment, including the whole House of Bishops, are recruited from their ranks. But the great jurists who have adorned the British bench or the British bar, and the eminent physicians who have shed luster on the medical science of England, have derived very little of their knowledge of law or of medicine from the universities; and of the great architects, engineers, naturalists, artists, and explorers, whose works or whose achievements constitute a large proportion of the national glory of the empire, not one can be said to have been made by these famous institutions. The British universities have, on the other hand, been rather administered in the interests of the aristocracy than of the people of England, and they have been adapted to the wants or the preferences of a class whose wealth lifts them above the necessity of labor, and who have no desire to be initiated into any professional career, unless it be the political—a career which is not a profession, and for which no especial training is esteemed to be necessary. It is therefore quite true that the British universities are not universities at all, if we use the word in its modern popular acceptance; if we understand it to mean, as it meant originally, institutions possessing and exercising the power to confer degrees, then they are entitled to the name.

The Universities of Germany correspond more nearly to the popular idea. They are devoted to supplementary education exclusively and altogether. They do not concern themselves in the least with questions of mental discipline. Their object is not to form, but to inform the mind. Constituting, moreover, as they do the only channels of access to the liberal professions and to the civil service of the empire or of its component states, they possess a political importance which is not equally enjoyed by institutions of corresponding grade in other countries. The students (native to the country) who attend these great institutions come up from the *Gymnasias* and the *Realschulen*, which occupy the position and fulfill the functions of the colleges of our country. The course of instruction in the *Gymnasias* covers quite as much ground as that of the American college of the eighteenth century, and in its practical enforcement is believed to be carried out much more thoroughly than can with truth be asserted of many of our collegiate institutions. Hence one is a little surprised to find in an able article on this subject, by a well known educationist,* published in March, 1880, the stricture on the German University system, that it leads to unsatisfactory results because the *Gymnasium* "does not carry the general culture high enough." There is another fault imputed by the same writer to this system which seems to be better founded. He says: "Everywhere in Europe, and nowhere more than in Germany, society is burdened with an unnatural and irrational aristocracy. Hence there is also an unnatural and irrational aristocracy of intellectual pursuits—unnatural and irrational because founded on tradition and not on culture alone. To this aristocracy belong the three traditional liberal professions, the-

*Joseph Le Conte, in *Princeton Review*, March, 1880, p. 201.

ology, law, and medicine, together with the professions of the scholar and scientific investigator. The so-called technical professions, equally intellectual—i. e., requiring equal general culture—are denied the cognomen of 'liberal,' banished with scorn from the university, and compelled to seek refuge in separate technical schools. Thus thought and action, the ideal and the practical—a twain that should be joined in indissoluble marriage—are forced into unnatural divorce, to the loss and injury of both. On the one hand, the technical professions would be imbued with the lofty spirit of true culture, and thus elevated and ennobled into true liberal professions; on the other, the culture of the university would be quickened and vitalized by the earnestness of men having practical ends in view. On the one hand, the general culture would create a soul under the dead ribs of the technical professions; on the other, the technical professions would give practical body to the too ideal culture of the university."

The exclusion of the technical professions from the university is a practical and economical error, which in our gradually developing American universities we have had the good sense to avoid; but it is certainly a mistake to attribute this exclusion in Germany to the unnatural constitution of German society, or to the existence of class distinctions among that people. The technical professions are not held in contempt because the occupations they offer are presumed to be unfit for noblemen. The prejudice against them, so far as it exists, is a prejudice which men of literary culture, not in Germany only but everywhere, feel toward pursuits to which the idea of a mercenary character in any way attaches. It is a feeling which those in whom it exists entertain as scholars and not as aristocrats. * * * If any tradition has been more persistently and consistently maintained from the earliest times down to the present, it has been the profound contempt of the man of letters for the lucre of gain. And such are the men who have always had possession of the universities of the Continent of Europe. So far, therefore, as science has presented itself in a character purely intellectual, it has received the hospitality of the universities; but at every point at which it has manifested a tendency to ally itself with the spirit of cupidity, it has been met by the scholar's dislike for the mean and mercenary, and contemptuously turned away. This is the reason, and the only reason, that the technical professions are driven to take refuge in Germany in separate technical schools.

In our own country, though universities, in the full significance of that term, cannot be said as yet to exist, yet they are gradually growing up by the expansion, on the part of some of our colleges, of the sphere of their teaching in the upward direction. One form of this expansion consists in the creation of professional schools, and in this process there is no such invidious distinction made with us as that above noticed as occurring in the German universities. On the other hand, in some instances, the technical professions have been provided

for where "the learned professions" are neglected; and the reason for this obviously is, that the demand for well educated men of these professions has in recent years been steadily growing, while in the others the supply has been fully up to the demand, if not in excess of it. In a single instance—the Johns Hopkins University—the attempt has been made to assume the university form from the beginning; but this institution, like the others, maintains an undergraduate course, or School of the Liberal Arts, differing from them only in making this an inconspicuous feature of its system. Among the colleges which have made the largest steps in advance in the direction of the higher development, are Harvard, Yale, the College of New Jersey, and our own institution.

COLUMBIA COLLEGE AS A UNIVERSITY.

Within the last twenty-five years Columbia College has greatly enlarged the scope of its teaching and the sphere of its usefulness. During the year ending in June, 1857, the total number of students matriculated was one hundred and forty-three, and the instruction given was confined to the department of Arts, and the number of professors and instructors was only six. Our School of Law, which was our first professional school, was opened just twenty-four years ago. Two years later the College of Physicians and Surgeons of this city became associated with us in an educational alliance as our School of Medicine. In 1864 was established our School of Mines, with the intention originally to confine its teaching to the object indicated by its name, that is to the preparation of well educated Mining Engineers; but, four years later, this design was enlarged by the institution of courses of instruction leading up to five different scientific professions, Mining Engineering, Civil Engineering, Metallurgy, Analytic and Applied Chemistry, and Geology and Palæontology. To these in 1881 was added a course in Architecture. In 1880 was established our School of Political Science, designed to train men for the domestic or diplomatic civil service, or to prepare them to discharge intelligently such duties of public life as may devolve upon them as members of our State or national legislatures, as members of municipal councils, or as public journalists. And in the same year was instituted the Department of Graduate Instruction, which opens up for us in the future a prospect of constantly increasing usefulness.

We have organized a course of instruction in the Modern Languages, the Romance, the Teutonic, and the Scandinavian, with the design not merely to afford, as is often the case in colleges, a few months' tuition in one or the other of these, for the purpose of imparting a more or less imperfect facility in translation, but to carry the student through a continuous course extending from the earliest undergraduate year into the department of graduate instruction if desired, and embracing not only a knowledge of the languages as spoken or written, but also a critical acquaintance with the masterpieces of their literature.

We have prescribed courses of study for the higher degrees of Master of Arts and Doctor of Philosophy; and have provided for the extension of the course of instruction in our School of Law to a third year, on the completion of which the students honorably proficient shall receive the superior degree of Master of Laws.

To a large extent, therefore, our institution has assumed the character of a university. This has not in any manner impaired its usefulness or diminished its attractiveness as a school for undergraduate instruction. On the other hand, in proportion as it has strengthened its professional schools and offered larger inducements to advanced students to come to us for that supplementary education which is needed after the training of the College is complete, in the same proportion the attendance in our undergraduate department has steadily grown.

On the literary side, we need a Department of Comparative Philology, and this need will soon be urgent. We have already many of the elements satisfactorily provided, out of which such a department will be able to gather the material for its work.

It has for years been found impracticable for any one officer, charged at the same time with heavy duties of class instruction, to direct the preparation of the English essays of the students of all the classes, to read and criticise carefully all those performances, and finally to communicate personally to each individual the results of such examination in such a manner as to impress upon the several authors the lessons to be derived from their merits or their errors. To burden the Professor of English Literature with the whole of this intolerable task has long been seen to be impracticable, except at the cost of destroying his usefulness in any other respect; and the work has, therefore, by authority of the Trustees, been for many years divided among several hands, the Professor of English Literature being charged with supervising the performances of only a single class.

Another of the present wants of our College on the literary side of its university teaching is a competent instructor or lecturer upon archaeology and ancient art.

Another educational want for which we have yet made no provision is a department of modern art—the Fine Arts—of which we have an admirable type in the School of the Fine Arts founded at Yale College by the late Mr. Street. We have already introduced into our School of Mines a course of Architecture, which, in one of its aspects, is counted among the Fine Arts, and is recognized and taught as such by the *École des Beaux Arts* of Paris. But in our school the subject is necessarily taught less from the æsthetic than from the practical point of view; and we cannot properly be said to teach Architecture as a Fine Art at all.

There are several Schools of Art in our city, though not one which adequately meets the need of the time.

In passing from the Literary to the Scientific side, it is to be noted,

first, that the important subjects of Ethnology and Anthropology are wholly unrepresented in our scheme. These subjects, which together constitute what may be called the Natural History of Man, have been prosecuted in recent years with an activity and fertility of results which must be pronounced truly astonishing.

The sciences of Ethnology and Anthropology should have an especial interest for us, since some of their most earnest and successful investigators have been our own countrymen. One of the earliest of these was Prof. Samuel George Morton, of Philadelphia, who so long ago as 1839 published his able and original work on the *Crania Americana*, which was received throughout the scientific world with an admiration mingled with surprise. Later American investigators in the same field have been the late E. G. Squier, of this city, first president of the American Anthropological Society, to whom we owe the first thorough exploration of the numerous mounds of prehistoric antiquity so widely scattered over our Western plains; also the late Lewis H. Morgan, of Rochester, whose studies of the history, affinities, usages, arts and architecture of the aboriginal tribes of this continent and of their probable origin have been most laborious and exhaustive; to say nothing of men still living and hardly less distinguished, among whom may be mentioned Prof. F. V. Hayden, formerly Director of the United States Survey of the Western Territories; Col. J. W. Powell, present Director of the Geographical and Geological Survey of the same region; Wm. Henry Dall, Esq., the author of recent reports on the orarian tribes of Alaska and the Aleutian Islands, the result of an exploration conducted under the auspices of the Smithsonian Institution; Prof. Alexander Winchell, late Chancellor of Syracuse University, who in a recent work entitled "Præ-Adamites," has presented in compact form one of the most able summaries of the present state of anthropological science which has yet appeared.

Anthropology is but a single branch of Natural History, though, considering the comparative dignity of its subject, it is one of special importance. But it is unfortunately the case that, in respect to all departments of this extensive subject, our provisions are equally imperfect. Zoology, Botany, Physiology, and Biology are all unrepresented in our scheme of instruction.

Our sister institutions on all sides of us are provided in these matters with a completeness which puts us quite to shame. The College of New Jersey has a Professor of Natural History and three assistant professors; it has also a Museum or Laboratory for work in Botany and Zoology, and provides systematic lectures in these sciences, and graduate courses in Biology and Palæontology, with no fewer than five instructors. The Johns Hopkins University has a department of Biology, with a Biological Laboratory, provided with all the most perfect instrumentalities for experimental research, having at its head an accomplished professor who has the aid of five associates or assistants.

Yale College has a Professor of Zoology, with an assistant, a Professor of Comparative Anatomy, a Professor of Botany, a Professor of Agriculture, who lectures also on Arboriculture, and a Lecturer on Histology, besides an instructor in Physiological Chemistry. Harvard University has three Professors of Botany, with two assistants, a Professor of Arboriculture, a Professor of Entomology, a Professor of Physiology, and two Professors, an instructor, and an assistant in Zoology. This institution possesses also in its magnificent Museum of Comparative Zoology, founded by the illustrious Agassiz, and directed now by his hardly less accomplished son, a School for the practical study of Zoology and Physiology, which, for the advantages it offers to the learner, is unsurpassed and perhaps unequaled anywhere in the world. Of course it is impossible that our inferiority in these important departments of natural science can long be permitted to exist. In Botany, especially, though we possess the most extensive and most valuable collection of dried plants in the country—a collection presented to the College nearly a quarter of a century ago by the eminent naturalist whose name it bears, and whose long connection with our College as professor and trustee is one of our most highly-prized and cherished remembrances—yet during all this time it has not been brought into use in the instruction of our students, or made available to their educational benefit.

Among the most serious deficiencies of our scheme of higher education on the scientific side are the want of a Physical Laboratory, with appliances necessary for the training of young men to methods of research, and also that of a similar laboratory for investigations in Organic Chemistry and Gaseous Chemistry. These wants, however, have been already prospectively provided for by the splendid benefaction recently assured to the College in the will of the late Stephen Whitney Phoenix. Mr. Phoenix was an alumnus of our College of the year 1859. His academic record shows him to have been distinguished as a student for pre-eminence in scholarship; and his subsequent life gave evidence of highly cultivated tastes and fondness for intellectual pursuits. He was one of the few men of generous impulses, whose clear judgment enable them to see that the most effectual way to advance the cause of the higher education in the country is to employ such means as they may propose to set apart for that object in strengthening an institution which is already strong, rather than in laying the foundations of a new one which must necessarily be feeble. It is known that he took pains during his life to inform himself of the points in which, in the domain of exact science, this institution is most in need of help, and that he made the disposition of his estate defined in his will in accordance with that information. Could his example be followed by some half-dozen more of our affluent alumni, or of our other fellow-citizens who, without having the sentiment of filial regard to stimulate them, are yet animated by a desire to contribute to the

progress of human enlightenment, all the deficiencies in our present scheme of higher education, above signalized, would speedily disappear.

It is the want here of a department designed to train young men to education as a profession, by giving instruction in the History, Theory and Practice of Education. The recommendation made on this subject in the last annual report of the President was not the first presentation of this project to this Board. As early as in 1853, when the proposition to remove the college from its original site was first agitated, it was proposed that simultaneously with the removal there should be a change of system, in which, to the course of undergraduate instruction already in operation, a scheme of university education also, either in continuation of the former or otherwise, should be added. This proposition was the subject of much deliberation and of sundry reports; but no definite result was reached until April 5, 1858, when a definite plan was reported and adopted. Immediately after the adoption of this plan, an additional resolution was offered to "add the 'science and art of education' to the subjects to be taught in the School of Letters." And this, too, was adopted with no apparent opposition. The scheme of university instruction here set on foot was but partially put into execution, and, after the experiment of a single year, was abandoned as being premature. Though "The Science and Art of Education" was placed among the subjects to be taught in the School of Letters, no Professor or other Instructor appears to have been appointed for the purpose, and this part of the scheme fell through with the rest. The fact remains, however, that by the adoption of the resolution above cited this Board distinctly committed itself to the proposition that the Science and Art of Education is a subject worthy to be taught in Columbia College. Had the general scheme proved a success, this part of it would have gone into operation also; and we should now have been able to look back upon a quarter of a century of experience of the inestimably valuable results accruing from the successful attempt, in this city at least, to transform the business of teaching from a trade to a profession. For the influence of the power here put into action would inevitably have reached not merely the educationists of the higher order, but every humblest teacher of the most insignificant primary on the island. Not that every such teacher would have been brought under the direct instruction of this chair. Possibly not one in five might have been so. But through those who were actually subject to this beneficial influence, the substance of the instruction would have filtered through to all the rest. The errors which these had been taught to avoid would have been stamped out, not only in their own schools, but in those of their colleagues; the just notions which they had imbibed would have been imparted casually or designedly to the rest, and the whole system of public education in New York, from the most elementary schools upward, would have been lifted to a higher level, and all engaged in its management would now be walking in the light of a sound philosophy

instead of groping blindly in the darkness of ignorance or the obscurity of uncertainty and doubt.

Pecuniary Hindrances.

Though it is many years since Columbia College began to be spoken of as a richly endowed institution, it is very certain that no college in the United States has been more sorely straightened for deficiency of means than this has been throughout the more than a century and a quarter since its foundation, with the exception of a few very recent years. Most colleges in difficult emergencies have found relief in the liberality of interested friends. Many have, in successive years, received benefaction after benefaction from their own attached alumni, or from the friends of education generally. Hardly one has failed to command, in its infancy, the undivided sympathies of the community in the midst of which it has been established, and whose interests have been seemingly more or less involved in its prosperity. But such has not been the good fortune of Columbia College either in the beginning or during its subsequent history. Its creation was violently opposed while yet it was merely a project in embryo; and its charter was only obtained after a long and very determined struggle. The contributions for its support from private sources, if any, were very meager; and its principal reliance for the means to erect its first building, and to provide the first essentials necessary to the prosecution of its educational operations, was a public lottery authorized by the provincial legislature; an expedient then frequently resorted to in aid of benevolent or educational institutions, though at the present time hardly regarded as a legitimate means of raising money. To the corporation of Trinity Church it was indebted for a site on which to build, having received from that body a grant of land considerably larger than necessary for the purpose, amounting to several acres, forming a part of what was then called the Church Farm, beyond the limits of the inhabited portion of the island. This donation, though at the time of vital importance to the infant institution, in default of which it might have failed to become permanently established, was, in view of the source from which it came and of the conditions accompanying it, not without an influence seriously prejudicial to its immediate interests; for it tended to estrange yet more widely those who had been opposed to it from the beginning, and whose good will it was most desirable to conciliate. The land received from Trinity Church, though it supplied the immediate need of a site for the College, was for many years otherwise unproductive. With the growth of the town, however, it at length fell into demand for building lots, and thus gradually became a source of income. The amount actually raised in money to set the College in operation in the beginning fell considerably short of thirty-five hundred pounds, a sum less than nine thousand dollars of our present currency. At the end of about a dozen years the need of additional resources began to be so severely felt, that an appeal was made to Sir Henry

Moore, the Royal Governor of the Province, for relief in the form of a grant of public land. The appeal was successful, and a tract equal to about one township of land was awarded to the College, situated very advantageously on the northeast border of the Province; but this, in the subsequent settlement of the disputed boundary between New York and New Hampshire (which then included Vermont), fell within the territory of the neighboring State, and so was lost to the College. After this the records of the College furnish no evidence of any benefactions received by it from public or from private sources up to the time of the Revolution; although a paper apparently designed for publication left behind by Dr. Myles Cooper, second president of the College, on his sudden flight in 1776, and quoted by President Moore in his History of Columbia College, claims that "since the passing of the charter, the Institution hath received great emolument, by grants from his most gracious majesty King George the Third, and by liberal contributions from many of the nobility and gentry in the parent country; from the Society for the Propagation of the Gospel in Foreign Parts, and from several public-spirited gentlemen in America and elsewhere." These gifts, whatever may have been their number or importance, were probably devoted to the enlargement of the library, and the improvement of the apparatus; for after the temporary suspension of the operations of the college during the Revolution, we find it, on its revival in 1784, so feeble financially, that its governors (then the Regents of the University of the State) hesitated to appoint a president, "because the deranged state of the funds of the college and the great losses it had sustained, rendered them unable to offer such a salary as would induce a suitable person to accept the office." The institution remained, therefore, for three years without a head, though regular exercises were maintained, and degrees were conferred, the diplomas being signed by the secretary of the corporation. In 1792 the wants of the college were in a measure relieved by a grant of seventy-nine hundred pounds, about \$20,000, from the legislature, and an annuity of seven hundred and fifty pounds, or about \$1,900, continued for five years. Encouraged by this liberality, the Trustees commenced the erection of an additional college building. They also established a School of Medicine, and appointed a Professor of Law, viz., Mr. James Kent, afterwards the distinguished chancellor. As a consequence of this enlargement of their scheme of operations, they speedily fell into sore embarrassment, and in 1796 addressed an unavailing petition to the legislature asking for a continuance of their subsidy beyond the time named for its cessation. A few years later, in 1802, some small addition to the resources of the institution was received from a grant of certain lands divided by the Regents of the State University between Columbia and Union colleges. These lands were situated at Ticonderoga and Crown Point, on Lake Champlain and Lake George; and a report from a committee of examination, appointed by the Trustees, gave reason to hope that they would

prove an important source of revenue. This anticipation was, however, disappointed, the lands remaining for many years unproductive, though subject to taxation. At length in 1811 the Crown Point lands, known as the Garrison lands, on Lake George, then in the equal joint ownership of Columbia College and Union College, were sold to James Caldwell for the sum of \$5,000, one-half coming to Columbia College; and seven years later, in 1818, the remaining Crown Point lands, called the farm at Crown Point, were leased for five years, at an annual rent of \$62.50. In this same year a portion of the land at Ticonderoga, amounting to ten acres, lying on Lake Champlain, was leased to James Caldwell, the purchaser of the Garrison lands at Crown Point, for a term of forty years, at a nominal rent and taxes, conditioned that the said Caldwell should "construct a wharf and suitable buildings for passengers within two years, and keep the same in repair, and direct the course of travel that way so far as he can." On the 3d of May, 1819, the remaining lands at Ticonderoga were leased for one year at a rent of fifty dollars; and in 1823 the eight acres at Ticonderoga, said to be then remaining unsold, were conveyed to the heirs of Peter Deale for the sum of two hundred dollars. Finally, on the 6th of May, 1828, the committee previously appointed to dispose of the lands at Crown Point, reported that they had sold the same for ten dollars an acre, and that the proceeds of the sale amounted to \$3,213.34.

The entire history of the disposition of these lands cannot be traced in the minutes of the Trustees; but from the ascertained particulars above given, it is evident that they went but a little way to supply the then urgent wants of the College. These wants were, during all this time, exceedingly great; and as the legislature, stimulated by the enlightened recommendations of the early governors of the State, had manifested a disposition to foster, by liberal grants, the infant educational institutions of the State, they were brought to the attention of that body in frequent memorials. The earliest of these representations was made in 1786 by the then governing Board of the College, styled the Regents of the University. It set forth the wants and embarrassments of the institution, and also the defects of its organic law. The legislature responded by passing an act placing the college under a Board of Trustees with clearly-defined powers, which act has remained substantially unaltered down to the present time; but it made no provision for its support or relief. A later petition was successful in securing the grant of seventy-nine hundred pounds above spoken of, and the annuity of seven hundred and fifty pounds for five years; but an application made in 1796 for the continuance of this annuity was unsuccessful. An application in 1801 for the specific sum of two thousand pounds, to enable the Trustees to complete an additional building then in progress, received no attention. This building remained in an unfinished state for many years, and the condition of things was brought to the attention of the legislature in a memorial adopted by

the trustees, March 7, 1814, in these words: "The foundation of a new wing to the edifice laid by the order and under an appropriation of your honorable body, has been for years a heap of ruins solely for want of further public assistance." The memorialists describe the condition of the College as on this account and many others discreditable to the city and the State. They say that, "Situated in the most important city of the State, an object of curiosity and remark to strangers, and indispensable in its position to a large portion of the students, who must obtain a liberal education on the spot or be deprived of it altogether, Columbia College presents a spectacle mortifying to its friends, humiliating to the city, and calculated to inspire opinions which it is impossible your enlightened body would wish to countenance." Of the wants of the College, they say: "The library of the College, which fell a sacrifice to the war of independence, has never been replaced but in so slender a degree as to make it a subject of ignominious comparison with the pre-eminence in this respect of other American colleges. The Philosophical Apparatus, originally good, has been damaged by long use and unavoidable accident, and is now incompetent to the advanced state of the Physical Sciences. There is no proper apartment for the reception of a decent library, there is no hall fit for the performance of public exercises. There is no astronomical observatory, which is of essential moment both to our commercial and military marine; a solid basis for such a structure was laid at the same time with the foundation of the new wing, and left unfinished for the same cause. Your memorialists are under the necessity of exacting, in two instances, the labor of two professorships from one person, which renders the toil unreasonable and oppressive. They have found it due to the state of science and to public opinion to institute a professorship of Chemistry as a part of the academical course, and have appointed a professor without being able to give him any compensation." After presenting further considerations of similar character, the trustees go on to say:

"Your memorialists are emboldened to hope that their appeal to the unanimity of your honorable body will not be fruitless, especially when, in addition to the preceding view they respectfully add:

"1. That the patronage which Columbia College has received for a period of thirty years has been very limited, and has not in the aggregate amounted (if your memorialists are correctly informed) to one-fifth part of the benefactions made with the most praiseworthy munificence to a kindred institution.

"2. That Columbia College was once in possession of landed property which, if she still retained it, would be amply sufficient for her wants and would save your memorialists from the afflicting necessity of importuning your honorable body. That property was transferred by the State of New York on great political considerations to other hands. It was entirely lost to the College, and no relief under the privations which the loss occasioned has hitherto been extended to her."

This last consideration proved effectual. Indeed, it is a little surprising that it had not been earlier and persistently urged. The reference is, of course, to the 24,000 acres of land constituting the grant from the colonial government, transferred in the subsequent adjustment of boundary to the State of New Hampshire. By an act passed April 13, 1814, the legislature transferred to the College "all the right, title, and interest of the people of this State in and to all that certain piece or parcel of land, with the appurtenances, situate in the ninth ward of the city of New York, known by the name of the Botanic Garden, and lately conveyed to the people of this State by David Hosack, with the appurtenances;" but this grant was coupled with the express condition "that the College establishment shall be removed to said tract of land hereby granted, or to lands adjacent thereto, within twelve years from this time; and if the said establishment shall not be so removed within the time above limited, then and from thenceforth this grant shall cease and be void, and the premises hereby granted shall thereupon revert to the people of this State."

Another hardly less burdensome condition required that the trustees of the College should, "within three months from the passage of this act, transmit to the trustees of each of the other colleges of the State a list of the different kinds of plants, flowers, and shrubs in said garden; and that, within one year thereafter, the said trustees of Columbia College should deliver at the said garden, if required, at least one healthy exotic flower, shrub, or plant of each kind of which they shall have more than one at the time of application, together with the jar or vessel containing the same, to the trustees of each of the other colleges of this State who shall apply therefor."

The estimated value of the Botanic Garden at the time of this concession was \$75,000; but the condition that it should be continued to be maintained as a Botanic Garden made it impossible for the trustees to derive from it any income by leasing; and the further condition that the college should be transferred to it, and that its buildings should be erected on it within twelve years, when means were lacking even to maintain the buildings actually existing in a habitable condition, was such as to make the grant a benefaction only in show. Naturally, therefore, the legislature was memorialized to repeal these conditions.

The earliest detailed statement of the financial condition of the College after 1800 which appears on the minutes of the trustees is of the date of 14th Dec., 1805. From that it appears that an income had begun to be derived from the lease of portions of the Church Farm, the land granted to the College by Trinity Church. The amount received from that source within the year was five hundred and sixty-one pounds fifteen shillings; equivalent at ten shillings sterling to the pound, which was the value of New York currency at the time, to about four-hundred dollars. Benefactions from unknown sources furnished a

capital which, invested in bonds, produced something less than four thousand dollars. The number of students in that year was eighty-nine; and if the tuition fee was then, as it appears to have been a few years later, one hundred dollars, the income from this source must have amounted to about nine thousand dollars. On the whole, the income for the year was therefore not far from fourteen thousand dollars. At about this point the income remained for many years nearly stationary, a gradual increase taking place from the rents of lots on the Church Farm, counterbalanced by diminished receipts from tuition, so that, in 1819, the total revenue fell short of sixteen thousand dollars, and in 1822 it fell to a little over thirteen thousand; though the income from rents had risen to more than six thousand dollars. Still, though by the practice of a severe economy the working expenses were kept usually within the income, the unavoidable outlay attending the necessary repairs and enlargement of the buildings caused the gradual accumulation of a debt, which, with no near prospect of extinguishment, added to the other burdens of the College that of a gradually increasing interest charge. At the close of the financial year in 1821 there appeared a deficit of more than five thousand dollars. A report made in January, 1823, shows a deficit for the year preceding of nearly four thousand dollars, and predicts a permanent annual deficit of eight hundred dollars. The deficit for 1823 was, however, nearly seventeen hundred dollars; for 1824, thirteen hundred dollars, and in 1829 it had increased to more than two thousand dollars. In 1837 the income had increased to sixteen thousand dollars, rents counting for nine thousand of this; but the deficit was nearly twenty-five hundred dollars. After this an annual deficit seems to have been looked for as a matter of course; and the debt consequently increased till we find it in 1845 over sixty-three thousand dollars, involving an interest account of between three and four thousand dollars per annum.

It has appeared above that the income of the College, early in the century, amounted to nearly fourteen thousand dollars. In 1850 it had increased to twenty thousand; but interest and other charges reduced this to sixteen thousand, and in 1851, the available income fell to fifteen thousand dollars. In 1853 it reached seventeen thousand, in 1855, twenty-one thousand, and in 1857, upward of twenty-three thousand; after which the increase was steady, and it has continued up to the present time, though many extraordinary expenses attendant on the regulation of the lots of the Botanic Garden, the establishment of the Law School, and the removal of the College, caused the annual balance to be continuously on the wrong side of the books for more than twenty years ending in 1863, when, for the first time, the income exceeded the annual expenditure by rather more than three thousand dollars. The subsequent establishment of the School of Mines, and the necessary provision for its accommodation and its outfit, turned the scale the other way, and in the next four years expenditures

exceeded income by more than forty thousand dollars. In the mean time the debt had been largely reduced by the sale of the site previously occupied by the College in the lower part of the city, and of sixteen lots of the Botanic Garden property. This reduction went on from year to year progressively; and in 1872 the entire debt was practically extinguished. From 1867 the available income has rapidly risen, and it is from this time only that Columbia College can justly be described as a College of large resources.

If therefore our College is to be called to answer at the bar of public opinion for the use she has made of the means at her command in advancing the higher education, it may fairly be claimed on her behalf that the inquiry should not extend beyond the last fifteen years. But within that period she may confidently challenge any institution of similar character, of this country or of any other, to show a more honorable record. From the moment in which she secured her release from the burden of debt and taxation which had weighed her down to the earth for half a century, she has applied her revenues with a most lavish hand to the enlargement of the sphere of her teaching, to the strengthening of her corps of instruction, and to the accumulation here of the instrumentalities which are necessary to make instruction thorough. The degree to which the improvement thus made in her educational efficiency has increased her attractiveness is easily made evident by a comparison of the numbers of students in attendance in the different departments, and in all the departments united, in 1867 and in 1882. It is by such comparisons only that the growth or decline of an institution of learning in the public estimation can be correctly measured.

In the year 1867, the total number of students matriculated in the College, the School of Mines, and the School of Law, was four hundred and fourteen. The School of Medicine, not being financially dependent on this Board of Trustees, is not included in this count. The total number of matriculates in the same three departments for the year just ending has been one thousand and fifty-four. The difference is six hundred and forty, showing an increase on the whole of one hundred and fifty per cent. The number of undergraduates matriculated in the college in 1867 was one hundred and thirty-nine. In 1882, the corresponding number has been two hundred and ninety-eight, an increase of about one hundred and fifteen per cent. The number of matriculates in 1867 in the School of Mines was one hundred and nine. In 1882 it has been two hundred and seventy-two. Here the increase has been again at the rate of one hundred and fifty per cent. In 1867, the number of matriculates in the School of Law was one hundred and sixty-six. During the year just closing it has been four hundred and seventy-one. In this school the increase has been over one hundred and eighty per cent. In the mean time the number of candidates for admission annually presenting themselves has correspondingly increased.

In 1867 it was about thirty per annum in the College; it is now one hundred and twenty-five, and is constantly growing.

The Faculties of all the Schools have likewise been greatly strengthened. In the School of Arts, three independent professorships have been created, representing Philosophy, History and English Literature, where there was but one before. Political Economy is also represented by an Adjunct Professorship. Chemistry and Geology have, moreover, been dissociated, and are now entirely distinct departments. An adjunct Professor of Greek has been likewise appointed, and the number of officers of instruction of inferior grade is large.

Liberal appropriations have been annually made for the increase of the libraries of all the schools, and for the purchase of scientific apparatus and the enlargement of the collections; and similar appropriations are annually placed at the disposition of every head of department, to provide for unanticipated wants and to defray the unavoidable expenses of the lecture rooms. The total amount of these departmental appropriations for the current year in the College and School of Mines amounts to more than \$19,000. In the School of Mines a course of instruction in Practical Mining has been established, to be given during the summer vacation, of which the design is to familiarize the students with the actual operations of mining, by themselves going into the mines, and doing the work of operative miners. A professor has been appointed to conduct this course and to superintend the work, and large appropriations have been annually made to defray the attendant expenses. No part of our system of instruction in Mining Engineering has been more profitable than this. A similar practical course in Mechanical Engineering has been also provided for, to be carried on in like manner during the summer, the students meeting for work and instruction in the great foundries of the city, which, by the courtesy of the proprietors, have been thrown open to them. A summer course in Geodesy has just been established, which will make its first excursion in the approaching vacation. The Director of this course, specially appointed for this work, has been successful in making arrangements with the Superintendent of the United States Coast and Geodetic Survey, and with the Director of the Public Survey of the State of New York, whereby he will be enabled to work in concert with them, and will be greatly benefited by their counsel and assistance. Instruments for this work of superior accuracy have already been purchased, and also observing tents for the shelter of the party at night during the summer campaign. An Observatory, which will be under the direction of the Instructor in Geodesy, is now in process of erection, constructed strictly with a view to scientific usefulness and without regard to cost, which will be the means of training our students to celestial observation and to Practical Astronomy. A Professor of Architecture has been appointed, and a course of instruction in the science of that useful and attractive profession has been already opened. For the equipment

at this department, with its necessary instruments, models and drawings, a friend of the institution has made to the College the generous donation of six thousand dollars. A School of Political Science, with five instructors, all of them specially trained to their several duties, has been in operation two years, and while in the future it may become self-sustaining, it is only at present maintained at a considerable annual outlay. A Graduate Department has been created, which offers instruction in almost the entire round of literary studies and the exact sciences, in which during the past year there have been students engaged in the study of Greek and Roman Literature, in the Danish Language, and in the Higher Mathematics. Our scheme of instruction in the Modern Languages, which has been above described, is probably more comprehensive and more complete than any other now in operation in the country.

These are some of the modes in which Columbia College, during the past fifteen years, has been employing its enlarged means for the benefit of those who may come here for instruction. In their prosecution, these means have been strained at times as far as they will bear; and hence it happens that there still exist in our general educational scheme, the deficiencies which have been noted in the preceding pages. They exist because it is a sad truth that the College is not financially strong enough to fill them up. Had we a phalanx, as is the case with many of our sister institutions, of liberal and sympathizing friends, to whom we might successfully appeal when we see our fondly cherished schemes of educational improvement rudely frustrated by the inexorable pressure of want, it may be safely said that this Board of Trustees would not rest until, in everything necessary to a perfectly appointed university of the highest order, Columbia College should stand without a rival upon the American Continent.

The comparative number of students in the several schools in 1867 and 1882 has been given above. It may be interesting to add the comparative number of Professors and other instructors in the two years named, in the same schools. In the School of Arts there were in 1867 seven Professors, one Adjunct Professor, two Tutors, and one Assistant; in all eleven. In 1882, eleven Professors, two Adjunct Professors, six Instructors, eight Tutors, and two Assistants; in all twenty-nine. In the School of Mines there were in 1867 eight Professors and eight Assistants; in all sixteen. In 1882 there were eight Professors, two Adjunct Professors, one Lecturer, eight Instructors, and nine Assistants; in all twenty-eight. In the School of Law there were in 1867 three Professors; in 1882, five Professors. In 1867 the total number of officers giving instruction in all the schools was thirty; or, deducting four giving instruction in more than one school, twenty-six; in 1882, the corresponding total was sixty-two; or, making deduction of nine for similar reason, fifty-three. If the Medical Instructors were added, this total would be somewhere between eighty and ninety.

The comparative expense of maintaining the several schools in the various years named illustrates very strikingly the liberality with which the resources of the College have been drawn upon, as they have gradually grown, for the purpose of improving its educational efficiency. In 1864 the total amount of the ordinary expenditure incurred for the maintenance of the School of Arts was \$68,029.48; in 1882 this amount is yet unascertained, but that for the preceding year was \$117,473.50. In 1867 the similar expenditure on account of the School of Mines was \$39,634.43; in 1881, \$95,691.40. The expenditure on account of the School of Law in 1867 was \$18,586.01; in 1881, \$52,745.55. The total cost of maintaining the institution in all its schools in 1867 was \$126,249.92; in 1881 it reached the sum of \$271,907.64. In this latter sum is included the cost of maintaining the School of Political Science in 1881, a school which did not exist in 1867. The estimated cost for the next year is \$287,572.44.

It is further to be considered that, during these last fifteen years, the revenues of the College have been heavily drawn upon for the construction of buildings. The buildings of the School of Mines, erected in 1874, involved an outlay of more than \$150,000. The Arts building on Madison avenue, and the boiler works and heating apparatus in the quadrangle, cost between \$250,000 and \$300,000. The Law building and Library, now in progress, will cost nearly \$300,000. The necessity of these expenditures has very prejudicially affected the development of the educational scheme. And it is a reflection which must fill the heart of every friend of the College with sadness, that these expenditures are only the beginning of a succession which must go on until the total shall become not less than three times as great. The Treasurer has informed the Board that, even with a faithful application of all the resources of the institution, present and prospective, the surplus of income from present rents over expenditure being also supposed to continue undiminished, the College will not be free from the encumbrance of debt incurred in carrying out the projects of building which have already received the sanction of the Board, before the autumn of the year 1890. But even that does not tell the whole story. Since the report of the Treasurer was made, in which the statement just cited appears, there have been encountered certain unexpected difficulties in the construction of the building designed for the use of the Library and the School of Law, which will involve unavoidable additional expenditures, of which the amount cannot now perhaps be exactly estimated, but which is certain to be serious. The mill-stone of debt will, therefore, probably hang about the neck of the institution a year or two beyond the limit of time fixed by the Treasurer.

But certainly the Trustees cannot intend that, for ten entire years from the present time, our College shall not be permitted to take a single additional step of educational advance. Debt is no doubt a great evil; but there are evils worse than debt, and among these is stagnation.

COLUMBIA COLLEGE AS A UNIVERSITY.

There is nothing which so animates me in the discharge of a whatever circumstances in life they may be placed, as the feeling that the work of the present is but a step in the progress upward to something higher and nobler and better, so there is nothing which so tends to repress enthusiasm, to crush down ambition, and to superinduce listlessness and indifference, as the consciousness of being hemmed in by an environment which paralyzes effort, and makes progress impossible. Certainly it would be better to spread out this burden of debt over a larger number of years, than to attempt to throw it off within the time proposed, if for the sake of effecting that object the development of our educational system, now so happily proceeding, should be even temporarily arrested. It is true that the operations of an institution of learning cannot be conducted without buildings, and that, in a city like New York, academical buildings must be more or less costly. It is also true that, as these operations are expanded, buildings must be enlarged; yet it cannot but be regarded as a grave misfortune, should the process of such enlargement be found to involve conditions which prevent the possibility of the very expansion for which it is presumed intended to provide.

But whatever may be the policy adopted, the day will come at last when the oppressive burden to which we are forced to bend our necks to-day will fall away. The magnificent possibilities which will then be in the hands of those who have control of the destinies of Columbia College will be such as no academic board in this country or abroad has ever hitherto enjoyed, and as perhaps no other ever will. As we cast our eyes forward, and contemplate the picture of our favored College, in that day of her complete emancipation and fully gathered strength, we cannot but feel a glow of exultation at the vision, dashed, it may be, with a natural tinge of envy. For, but for the burdens which are now dragging us down to earth, that day might be this.

In that day no department of human knowledge will be without its living expositor in these halls, and no seeker after knowledge, whatever may be the nature of his aspiration, will fail to find satisfaction here. And in that day the treasures of learning here accumulated will be offered freely to all alike, without invidious distinctions of race, or sex, or condition in life. And in that day, instead of the sixteen hundred students now on her roll, Columbia College will gather together here five thousand—perhaps not fewer than ten thousand. And the corps of her instructors, instead of numbering eighty as at present, will probably be counted by hundreds.

HOFWYL AS SEEN BY AMERICAN EDUCATORS.

VISIT BY PROF. JOHN GRISCOM IN 1818 •

FELLENBERG AND HIS PRINCIPLES OF EDUCATION.

I was introduced to Mr. Fellenberg by three letters—two from Paris and one from Geneva, and was cordially received, having recorded my name and residence in a book in the office, and sent in my card and letters. He is a man of middle age, of a mild and agreeable countenance, and of polite and genteel manners. He seated me on a sofa, and entered upon an explanation of the principles of his establishment, and the particular views of education, which had induced him to engage in it. He considers society as divisible into three distinct parts: the higher (comprehending the noble and the wealthy), the middling, and the poor. The greatest defects of education he supposes to exist in the two extreme classes, and that these distinctions or classes among men would always prevail in every civilized country he believed to be incontrovertible; and, of course, any attempt to break down the distinction would be fruitless. It is, therefore, of consequence that they should be each educated in a manner conformable to their situations, but in such a way as to develop, to the highest extent, the best faculties of their nature; and, while it preserves the proper relation between them, it should, at the same time, encourage the feelings of kindness and sympathy on the one part, and of respect and love on the other. This, he thought, could be effected upon no plan so effectually as by bringing them up side by side, so that they should have each other constantly in view, without any necessity whatever of mixing or associating. The rich, by observing the industry, the skill, and the importance of the laboring classes, would learn to entertain just sentiments respecting them, and the poor, by feeling and experiencing the kindly influence of the rich, would regard them as benefactors.

With respect to the best means of cultivating the faculties which, in their due operation, are to promote the permanent happiness of men, he considers agriculture as affording opportunities and advantages of the greatest importance, and next to this, the mechanic arts. Agreeably to these leading views, his establishment consists of two distinct parts; a boarding-school of the sons of noblemen and gentlemen, in which no pains are spared to provide them with teachers in every useful science; and of a school of boys, taken from the poorest class, who are clothed and fed in a very plain, coarse, and farmer-like style, and who work diligently in the fields at employments adapted to their strength and skill. During two hours in the day in summer, and more in winter, these boys are instructed in letters, and in music. They are likewise introduced into the workshops, and taught the business of a blacksmith, a carpenter, a wheelwright, a cabinet-maker, a turner, a shoemaker, or a worker in brass, according as a particular talent for any of these may manifest itself. The produce of the labor of these boys bears no inconsiderable proportion of the expense of their maintenance and instruction.

WORKSHOP AND FARM-HOUSE.

After this brief explanation of his principles, Fellenberg introduced my companions and myself to Count Louis de Villevielle, a gentleman from the South of France, who, reduced by the revolution, has attached himself to Fellenberg, and appears to live with him as a sort of companion.

* A Year in Europe, 1818-19. By Prof. John Griscom, a member of the Society of Friends and an eminent teacher and educator in his day.

He attends to strangers, and goes with them through the grounds, shops, &c., of the establishment. He proved to be a very sensible, well informed man, and altogether disposed to satisfy our inquiries. He conducted us to the workshops. In one of them a fire engine of a large size had just been completed in a style of execution which would do credit to London or New York. In these shops all the instruments of agriculture are made, and it is the constant aim of the principal to improve upon the form and structure of them, and to invent others which experience may indicate the use of. As they make more than the farm requires, the surplus is sold to the neighbors.

In the evening the Count conducted us to the farm-house, where the class of the poor boys are lodged, fed, and instructed. We found them at supper, on a kind of hasty-pudding, with whey and boiled potatoes. They breakfast on a piece of bread and an apple or something as simple, and dine between eleven and twelve on vegetable food alone. Once a week only (on first day) they have meat and wine. They are thus taught a lesson of simplicity with respect to their manner of living. The furniture of the house corresponds with the dress and clothing of the boys. After supper they went up stairs to the school-room to take a lesson in music. Their teacher (Vehrlly) is a young man of very extraordinary qualifications. He received his early education from his father, who filled, in a distinguished manner, the office of schoolmaster for thirty years. He began at an early age to assist his parent in the discharge of his office. On coming to reside with Fellenberg, his views were farther expanded, and he entered with enthusiasm into the concerns of the establishment, and willingly undertook the formation and direction of the class of the poor, in all their exercises, agricultural, literary, scientific, and moral. He lives with them, eats, sleeps, and works with them, dresses as they do, and makes himself their friend and companion, as well as their instructor. He is eminently fitted for such an occupation by his genius, his address, his temper and disposition, and above all, by his religious principles. The school-room serves also for a shoemaker's shop, and probably accommodates, occasionally, the tailor and harness-maker. The boys always take a lesson of one hour between supper and bed. This lesson is frequently confined to music. They are taught it by principles, but they use no instrument but their vocal organs. Fellenberg lays great stress on music as a means of bringing the mind and heart into harmony with truth, and of inspiring the mild and benevolent affections. He thinks it has been very beneficial in reclaiming many of these boys from the vicious habits they had acquired from the low and exposed lives they had been subject to. By teaching them to sing religious songs, together with those that are simply patriotic, he says their attention is diverted from those vile ballads which are common among low-bred people; and that they find in this new entertainment a happy substitute for the coarse and vulgar expressions to which they were addicted. The boys of this class appeared to be very healthy and contented. They are taught to pay the utmost attention to cleanliness. Their clothing in summer is of coarse cotton, and in winter, of woolen cloth. They go barefooted, except when they work in the fields, or when the state of the weather requires them to wear shoes and stockings; but their heads always remain uncovered. Many of them, as might naturally be supposed, enter the school with the seeds of scrofulous disorders; but, by the effect of a simple and wholesome diet, cleanliness, and labor, they are restored to health with scarcely any medicine. Some of them on their entrance are feeble and debilitated, unable to endure cold, heat, or labor; but when once they had become accustomed to the regimen of the school, they willingly encounter rain, storms, and severe cold, whenever their work calls them abroad, without shrinking from, or regarding the exposure. They are taught to mend their own clothes. In summer they rise at five, and in winter at six; and after having dressed themselves and said their prayers, they receive instruction for an hour. They then breakfast, after which they go to work until half-past eleven. They have then half an hour for

dinner; after which Vehrly gives them a lesson of one hour. They work out till six, and after eating their supper, receive further instruction, which concludes with prayer, and they are generally in bed between eight and nine o'clock. But this distribution of time varies according to the seasons. In winter five or six hours a day are devoted to sedentary instruction. The morning of the first day of the week is always devoted to exercises of piety, and after dinner some hours are given to instruction in sacred history. But their lessons are by no means confined to the school-room. Vehrly takes pleasure in questioning them on subjects of natural history, geography, religion, morals, or any other useful topic, while they are at work in the fields or shops; and it may readily be conceived, that, with this devotion to the improvement of his pupils, occasions will perpetually present themselves of conveying instruction in every kind of knowledge calculated to expand the minds of children and to cultivate their best affections.

MOTIVES TO STUDY AND LABOR.—PESTALOZZI'S METHOD.

With regard to the most effective means of eliciting the powers of the mind, and of conducting the literary exercises of young people, great credit is due to Pestalozzi, whose veteran labors, as one of the most enlightened teachers of the age, were well known and acknowledged long before the commencement of the Hofwyl Institution. His plans of communicating knowledge are in a great measure practised by Vehrly. Much pains are taken to impress on the minds of the pupils a deep sense of the importance of time, and of habits of industry; and from the reports that have been published by commissioners appointed to examine the establishment, it is evident that the most favorable results have attended these endeavors. The children are so effectually redeemed from their former vicious habits, that, in their most free and noisy sports, not an expression is heard offensive to innocence or good manners. After working ten hours in the day, they give themselves up, when their teacher permits, to the liveliest recreation; but a word from Vehrly is sufficient to induce them to leave their sport and to engage in some other exercise. The progress which they make in knowledge is truly surprising when it is considered how adverse their former habits have been to all intellectual abstraction. In a few years, or even in less time, they learn to read, write, and calculate with and without the use of pencil or pen; the elements of drawing become familiar to them; and they acquire good notions of geometry, especially in its relation to field surveying, and its application to descriptive drawing. Botany and mineralogy constitute part of their amusements. They become well acquainted with all the plants of Hofwyl, and their different qualities, both the sanitary and noxious. Of the minerals also, they acquire the names and principal uses, and they make collections of all that is valuable and curious in minerals and vegetables. Some of them are very attentive to the arrangement of their little cabinets. The principal, when walking with them in the fields, is often called upon to decide disputes relative to the nature of stones or vegetables. But the most admirable trait in the character of this school is the tone of religious feeling which, it is said, pervades it. This could not be accomplished were not Fellenberg and Vehrly both strongly imbued with a sense of religious obligation and unremittingly attentive to awaken those sentiments in the minds of the pupils. They have learned by heart more than fifty hymns, and many portions of sacred history. They are regularly attentive to one practice, which is a pleasing source of instruction, and at the same time serves to demonstrate the progress they have made in useful acquirements. At the close of every week they write in a book provided for the purpose, an account of whatever has impressed their minds with the greatest force. It may be either a moral reflection, a description of a plant or an instrument, an account of a conversation, or an extract from something they have read. We saw some of these journals; they were mostly in the German language, and the greater number were written with remarkable neatness. Some of them contained drawings that

evinced no inconsiderable skill, and an eye accustomed to accuracy of observation.

It will readily be conceived that a plan of instruction so admirable, and constantly directed to the best and purest affections of the mind and heart, can scarcely fail to redeem from indolence and vice those whose habits have been the most degraded. And it has accordingly happened, that, notwithstanding the boys under Vehrly's charge have been taken from the very lowest ranks, and some of them the children of beggars, but one instance has occurred of such inveterate vice as to render it eventually necessary to abandon the culprit to his corrupt propensities, and expel him from the school.

In the religious exercises, which take place on the first day of the week, the boys of the poor school assemble with the superior class, but on no other occasion.

AGRICULTURAL DEPARTMENT—FARM—GARDEN.

After breakfast, we repaired to Hofwyl, and were conducted by the count, first to the place where the agricultural instruments are deposited. The drill, or machine for sowing seeds of various kinds, by which one half the seed is said to be saved, has been improved by Fellenberg. The *extirpator*, for destroying weeds, and the *scarificator*, for paring the soil, were among the things in this collection; but I was surprised, when Fellenberg, in reply to my questions, informed me that no attempts had been made to improve the common plow. That which appears to be in universal practice in Switzerland is probably the same used by the great-grandfathers of the present race, and is much more awkward and clumsy than the English plow. The mould board is only a flat plank placed at an angle with the beam. The plank is often changed to the other side of the plow, at each end of the field, so as to throw the furrow always in one direction, but for what reason it is difficult to imagine, except on the side of a steep hill, there may be some advantage in casting the furrows downward. But, as these plows are constructed, I am persuaded it requires nearly or quite double the team to perform a given quantity of labor as in America. I noticed in the yard a new sleigh, designed to hold about eighty persons, and to be drawn by fourteen horses. This is intended for the amusement of the higher class of boys. The snow is often very deep in this part of Switzerland, and continues some months. The stables exhibited a collection of the largest cows I ever saw. They are kept to the stalls all the year, and are fed with grass in the summer. The greatest care is taken to economize the manure. The yard which receives the litter is made concave, and has a well in its center, whence water is thrown over it in dry weather. A large reservoir, lined with stone, receives the wash of the stables, which is from time to time thrown over the contents of the yard. The cows were mostly fat enough for good beef. They seldom give more than twenty-four bottles in a day, and, upon an average, not more than sixteen bottles, or about twelve quarts. We were next conducted over part of the farm. It consists, in the whole, of 240 acres, and certainly affords a neat specimen of agricultural skill. We were shown the garden and play-ground of the upper school, and the fixtures for their gymnastic exercises, etc. Among the latter, throwing the lance is practiced. They aim from a distance at a post, the top of which is loosely attached by hinges on the remote side, and the lancers endeavor to strike with sufficient force to overturn it. Each of them has a portion of garden ground assigned to him, which he cultivates as his own; while a more extensive enclosure belongs to them in common, in the labor of which they are governed by rules adopted by themselves. They have their choice also of the mechanic arts, facilitated by the numerous workshops on the premises.

PROVISION FOR THE RICH.

The Hofwyl establishment, as I have before remarked, consists of two classes, the rich and the poor. The class of the rich contains at present about eighty. Twenty of these, consisting of children under ten years of

age, are placed under the care of a respectable gentleman and his wife, in a house belonging to Fellenberg, situated about a mile from his own residence. A teacher or two have the charge of their instruction both in and out of the house. From this house and ground we had a magnificent view of the eastern Alps. The elevation of some of the summits in this range is but little less than that of Mount Blanc; and the extent of the chain covered with snow was much greater than any I had seen. The air was very clear, exhibiting the rich white of this stupendous ridge of mountains, in the finest style imaginable.

The other sixty, constituting the most prominent part of the Hofwyl institution, are provided with more than twenty teachers, or professors. Among the pupils are several princes and the sons of ministers of state, &c. The price of board and tuition varies from £100 to £300 sterling, per annum. We were not admitted to the interior of the building occupied by these students. We saw none of the performances of their schools, or their exercises, except a little riding on horseback, on saddles without stirrups; the horses trotting in a circle, guided by a rope held by a boy in the center; the professor standing, likewise, in the middle, and directing the rider how to sit. In this exclusion from the interior of his school we were treated by Fellenberg like most, if not all, of his visitors. None are invited to the exercises, and none, of course, would go in without invitation. Either the trouble and distraction which the general admission of his numerous visitors would occasion oblige him to adopt this course, or there is not, in the classification and operations of his school, enough of refinement, talent, and perfection to support the name and to correspond with the character of eminence he has succeeded in obtaining. My own impression is that both these causes operate in producing his decision. The daily and almost hourly attendance and interference of company would certainly be extremely troublesome. He does not profess either to have adopted any plan by which his pupils are rapidly brought forward. His system, as he explained it to me, is even opposed to a hasty progress. He wishes to allow his plants to arrive at full and vigorous growth by a slow, cautious, and well-directed training, and by carefully removing from the soil every obstruction, rather than urge them by a hot-bed culture. He justly thinks that all he can do is to lay a solid foundation, that education is, or ought to be, the business of a whole life. Moral and religious principles he regards as the basis of all that is excellent in man; and, accordingly, great pains are taken to inculcate the doctrines of Christianity agreeably to the profession of the parents and guardians of the pupils. The Catholic scholars have a clergyman or professor of their own sect, and the emperor Alexander has provided for the instruction of the Russian pupils in the principles of the Greek church. Fellenberg's character, as a man of principle and piety, is, I believe, decidedly in his favor. He has the manners of a gentleman, and the whole exterior of his establishment bears the marks of considerable taste and judgment.

Besides the three schools already mentioned, he has another about half a mile from Hofwyl, where young men attend, during the winter, to courses of instruction in those subjects which relate to agriculture, and he lectures himself, I believe, on the practical operations of farming. It is here, too, that the professor of chemistry has his laboratory and lecture-room. We were introduced to him (Dr. Strobe), and judged him to be a good chemist. He is also the physician of the establishment, and his laboratory indicates an attachment to his profession, and judgment in its practical details. The philosophical apparatus is, however, unworthy of the institution, and ought not, I should hope, to be taken as a sample of the whole interior. In taking leave of Fellenberg, he expressed much regret at the shortness of our stay and the consequent want of more opportunities of conversation. I cannot but regard him as a man of more than mediocrity of talent; a man of penetration and judgment; but rather prone, perhaps, like other German philosophers, to theorize on human nature, and to fancy that new and important discoveries are yet to be made in the principles of human action.

UNPOPULARITY OF HOFWYL AT HOME.

From the information we received from others, as well as from the statements of Fellenberg himself, it is evident that his plans have ever been regarded with jealousy by a great number of his most influential neighbors and fellow-countrymen. He was at first condemned as a visionary, but when he had fairly demonstrated the practicability and utility of his schemes for the improvement of education, they accused him of sinister views, and alleged against him that his motives were mercenary, having an eye chiefly to the profits of the establishment. This narrow-minded spirit has not been content with mere expressions of disapprobation and condemnation. The government of the canton has gone so far as to lay positive obstructions in his way, and to threaten him with the weight of their aristocratical authority. He had a few years ago devised a plan for diffusing some of the benefits of his experience in the government of youth, throughout the canton. He invited the teachers of schools to repair to Hofwyl during the period of their vacation, and there to avail themselves of such information as the institution would afford, and their time would admit of. This offer was gladly accepted; but the next season the teachers of the canton were most arbitrarily interdicted by the government from resorting to Hofwyl. Fellenberg, thus very ungenerously thwarted in his wishes to do good, opened his establishment for the benefit of other cantons, and has thus had it in his power to extend still more widely the advantages of his system. His great desire is to introduce a taste for agricultural pursuits connected with an amelioration of the indigent classes. He is himself of a patrician family, and his haughty competitors do not relish what they foolishly consider as a diminution of the dignity of their order, by his resorting to the task of an instructor. But though the Bernese government is thus actuated by ignoble sentiments toward the Hofwyl establishment, the most distinguished and enlightened characters in other parts of Switzerland, are decidedly in its favor. At Geneva it is considered as an honor to Switzerland; and, if we may judge from the patronage that its founder has received from other countries, from England, Scotland, Germany, Russia, &c., it may be inferred that the Fellenberg system of instruction is highly approved by the most competent judges of real merit in Europe.

STUDIES AND ROUTINE IN SUPERIOR SCHOOL.

The superior class consisted of nearly 100 pupils, taught by upward of thirty professors. The course of instruction embraces the Greek, Latin, German, and French languages and literature; history, civil and sacred; geography; mathematics, pure and mixed; natural and mental philosophy; chemistry; music; drawing; gymnastics, including riding, swimming, dancing, &c.; natural history in all its branches; and religious instruction.

The pupils rise at six in winter and five in summer; they breakfast at seven, eat a little at ten, dine at noon, take a luncheon at five, and sup at eight. Five hours are appropriated to study in the forenoon and four in the afternoon; the rest of the day being devoted to their gymnastic, agricultural, and mechanical exercises. This arrangement, however, is not absolutely restrictive, but is made to conform to the varying circumstances of the establishment, the health and genius of the pupils, &c. The greatest pains are taken to cultivate their moral and religious sensibilities. The language chiefly spoken is the German. The internal or civil government (if it may be so called) of the school is regulated by a constitution and by-laws administered by the pupils themselves, and for which object they have their legislative and executive officers, under the supervision of the principal. The motives of emulation, as they are ordinarily excited by rewards, medals, honors, &c., or by a division into classes in the numerical order of first, second, third, &c., form no part of the Fellenberg system. His aim is to address his instructions to the more reasonable and noble principles of their nature, and by the number of his professors (for he has had as many as thirty-five with less than 100 pupils), to unite all the advantages of private with those of public instruction.

GENERAL IMPRESSION.

I have no hesitation in saying that, from all that I have read and all that I have seen of this establishment, it does appear to me to be conducted upon principles which are calculated to afford the very best kind of education which it is possible to confer upon a young man, whatever may be the situation which he is to fill in active life. As it regards the poor, it is difficult to conceive how they could be brought up in a way which would better prepare them for filling the stations of industrious skillful, and intelligent laborers. With respect to the rich, while they are cheerfully pursuing an excellent course of literary and scientific instruction, they are effectually preserved, by the principles of this institution, from those idle and vicious habits which so commonly result from the vacant time of colleges and universities. By turning their attention to agriculture and the mechanic arts; by inspiring them with a love of labor, or at least of a useful application of their strength and muscular activities; by exercising their ingenuity in the use of tools and instruments; by familiarizing them to an attentive observance of nature in her different kingdoms, and in the revolution of seasons,—a foundation is laid for those more expanded feelings and generous sympathies which bind the upper to the lower classes of the community, and eventually tend to exalt the condition of humanity.

THE MORAL CHARM.

But the greatest recommendation of the Pestalozzian and Fellenberg plan of education is the moral charm which is diffused throughout all its operations. It cannot but happen (all other things being equal) that pupils thus educated will become not only more intelligent men and better philosophers, but also more moral and dignified members of society. I cannot but cherish the hope that this scheme of education, of combining agricultural and mechanical with literary and scientific instruction, will be speedily and extensively adopted in the United States. I am aware that it would have to contend with serious difficulties. The prejudices and habits of the people would be against it. The high notions of independence, so early imbibed and strongly cherished among us, would submit, in all probability, with an ill grace to the alternation of labor with the exercises of a school. The pulse of the nation has already been felt on this subject by a benevolent individual (W. Maclure), who, having visited the institutions of Pestalozzi and Fellenberg, was resolved, if possible, to establish one or more schools in the United States on a similar plan. But, after traveling from New York to Lake Erie, he could find no one who would agree to second his views; none who did not consider the plan as either unnecessary or impracticable. Thus discouraged, he relinquished the project, though few persons in the world would have supported it by greater pecuniary sacrifices. Still I cannot but believe that, if it were once introduced and brought fairly into operation, its superiority would be immediately manifest, and that the first successful example would be rapidly followed in different parts of the country. I have but little doubt that, on a good productive farm of 250 or 300 acres, provided with suitable buildings (which need not be very costly) and well stocked, a school of twenty-five or thirty boys, conducted on the plan of Fellenberg's school, would maintain itself, and leave a gain in favor of the farm. A few such schools would soon impart, to a large and populous district of country, a moral tone of incalculable importance to its highest interests and welfare. I know of no means by which a benevolent and wealthy individual could do so much good, at the same expense, as by erecting one or more such institutions, in any of our Middle States. If white children could not at once be obtained to begin with, I would take the children of colored people. These could be procured at a suitable age, and taken on indentures to remain a certain number of years, or until they were of age, if it should be found requisite, as in some cases it might be. Such an experiment, with persons of this description, would be highly

interesting. It would put to flight the ridiculous theory of those who contend for an organic inferiority on the part of the blacks. It would in time produce examples very beneficial to our black population; and in reference to the scheme of colonization, now becoming popular, it might prove extremely important, by furnishing individuals admirably qualified by education, habits, and morals to aid in the management of an infant colony. The great difficulty would be, either in America or anywhere else, in finding persons qualified to conduct such schools. Such characters as Vehrly are rare. Without a deep sense of religion, united with the proper intellectual endowments on the part of the teacher, the scheme could not prosper. Its basis is the mild but fervent spirit of Christian love. It is, however, the happy nature of such a temper to beget its own likeness in the hearts of others; and it might reasonably be presumed that one successful example would readily prepare the way for others.

We could not part with the Count de Villevelles without feeling and acknowledging his indefatigable attentions. He is strongly impressed with the superiority of the Hofwyl system. "In other places," he observed to us, "instruction is the end, and education is only secondary. At Hofwyl, education is the end, and instruction is the means of attaining it."

MR. SIMOND'S VISITS IN 1817-19.

Mr. Simond in his *Tour and Residence in Switzerland in the Years 1817, 1818, and 1819*,* visited Hofwyl several times, and wrote the first elaborate account of the Institute for the English reading public in the *Edinburgh Review* (No. 64, for October, 1818), which was reprinted in the *Academicien* for June, 1819. He found the farm in excellent order, brought so by Mr. de Fellenberg's application of sound principles of husbandry, and the domestic life of the institution in advance of anything he had seen of boarding schools. Madame de Fellenberg entered heartily into the plans of her husband. She presided at the meals of the large family—the table, in the horseshoe shape, holding over seventy young men of the first families of Europe, and several professors with their families. On his second visit he was permitted to join Mr. Wehrly [we print the name of this excellent teacher Wehrli of the Poor School, or School of Industry, as given in the printed account] in his daily round both in the field and in the house, and saw the pupils in school and in recreation. We give here, somewhat abridged, his account of the School of Industry:

The school was instituted in 1808 to systematize the domestic and out-of-door life of the pupils, with a view of showing how the children of the extreme poor might be best taught, and their labor at the same time might be applied to their own support and education. He was fortunate in securing the services of a young man from Thurgovia, who had all the natural aptitudes for the position, and a zeal and willingness born of high motives of action. The teacher secured the confidence and sympathy of his poor pupils, by living and working with them. They enter on the work of the day at sunrise, first breakfasting and taking a half hour's lesson in the school-room. They dine at noon with some pastime and another school lesson of an hour, and work in field or shop till six. The evening is given to music, conversation, and working up the memoranda and accounts for the day. The pupils are divided according to age and strength into three classes, and an account is kept of the occupations of each class, and of each department of the school—the family, the occupations, and each crop. Every day each account is posted up—the labor credited to its proper class, building, and crop. In the winter and in wet

* *Simond's Switzerland*, 2 vols., Boston: Wells & Lilly, 1822. Reviewed by Mr. Edward Everett in the *North American Review* for October, 1822.

weather suitable occupation is found for each class or for individuals, for the special individual aptitude of each pupil is studied, so that the work is done with a will and with better results. All the labor of the farm and the school, and the mending of the implements and clothes—threshing, sawing wood, knitting—is well done. The boys are thus trained to special industries in a natural way, and on leaving school they enter at once on an occupation, without a prolonged apprenticeship. They are not educated above their station, and become at once farmers, tailors, carpenters, and other paying work-people. All are taught music and the manual of arms, and leave the school with such little earnings as they have been able to lay up out of the products of a little private garden, the sale of seeds, and other emoluments of their school life. This school was at first a charge to the founder, but in 1818 it met its own expenses.

We append to this account of a Swiss Poor School, Mr. Locke's Plan of a *Working School for English Poor Children*, submitted in 1697:

WORKING SCHOOLS—1697.

Locke's plan is as follows: "The children of laboring people are an ordinary burden to the parish, and are usually maintained in idleness, so that their labor also is generally lost to the public till they are twelve or fourteen years old.

"The most effectual remedy for this that we are able to conceive, and which we therefore humbly propose, is, that, in the fore-mentioned new law to be enacted, it be further provided that working schools be set up in every parish, to which the children of all such as demand relief of the parish, above three and under fourteen years of age, whilst they live at home with their parents and are not otherwise employed for their livelihood by the allowance of the overseers of the poor, shall be obliged to come.

"By this means the mother will be eased of a great part of her trouble in looking after and providing for them at home, and so be at the more liberty to work; the children will be kept in much better order, be better provided for, and from infancy be inured to work, which is of no small consequence to the making of them sober and industrious all their lives after; and the parish will be either eased of this burden or at least of the misuse in the present management of it. For, a great number of children giving a poor man a title to an allowance from the parish, this allowance is given once a week or once a month to the father in money, which he not seldom spends on himself at the ale-house, whilst his children, for whose sake he had it, are left to suffer, or perish under the want of necessities, unless the charity of neighbors relieves them.

"We humbly conceive that a man and his wife in health may be able by their ordinary labor to maintain themselves and two children. More than two children at one time under the age of three years will seldom happen in one family. If, therefore, all the children above three years old be taken off from their hands, those who have never so many, whilst they remain themselves in health, will not need any allowance for them.

"We do not suppose that children of three years old will be able at that age to get their livelihoods at the working school, but we are sure that what is necessary for their relief will more effectually have that use if it be distributed to them in bread at that school than if it be given to their fathers in money. What they have at home from their parents is seldom more than bread and water, and that, many of them, very scantily too. If, therefore, care be taken that they have each of them their belly-full of bread daily at school, they will be in no danger of famishing, but, on the contrary, they will be healthier and stronger than those who are bred otherwise. Nor will this practice cost the overseers any trouble; for a baker may be agreed with to furnish and bring into the school-house every day the allowance of bread necessary for all the scholars that are there. And to this may be also added, without any trouble, in cold weather, if it be thought needful, a little warm water-gruel; for the same fire that warms the room may be made use of to boil a pot of it.

"From this method the children will not only reap the fore-mentioned

advantages with far less charge to the parish than what is now done for them, but they will be also thereby the more obliged to come to school and apply themselves to work, because otherwise they will have no victuals, and also the benefit thereby both to themselves and the parish will daily increase; for, the earnings of their labor at school every day increasing, it may reasonably be concluded that, computing all the earnings of a child from three to fourteen years of age, the nourishment and teaching of such a child during that whole time will cost the parish nothing; whereas there is no child now which from its birth is maintained by the parish but, before the age of fourteen, costs the parish £50 or £60.

"Another advantage also of bringing children thus to a working school is that by this means they may be obliged to come constantly to church every Sunday, along with their schoolmasters or dames, whereby they may be brought into some sense of religion; whereas ordinarily now, in their idle and loose way of breeding up, they are as utter strangers both to religion and morality as they are to industry.

"In order therefore to the more effectual carrying on of this work to the advantage of this kingdom, we further humbly propose that these schools be generally for spinning or knitting, or some other part of the woollen manufacture, unless in countries [that is, districts] where the place shall furnish some other materials fitter for the employment of such poor children; in which places the choice of those materials for their employment may be left to the prudence and direction of the guardians of the poor of that hundred. And that the teachers in these schools be paid out of the poor's rate, as can be agreed.

"This, though at first setting up it may cost the parish a little, yet we humbly conceive (the earnings of the children abating the charge of their maintenance, and as much work being required of each of them as they are reasonably able to perform) it will quickly pay its own charges with an overplus.

"That, where the number of the poor children of any parish is greater than for them all to be employed in one school, they be there divided into two, and the boys and girls, if thought convenient, taught and kept to work separately.

"That the handicraftsmen in each hundred be bound to take every other of their respective apprentices from amongst the boys in some one of the schools, in the said hundred without any money; which boys they may so take at what age they please, to be bound to them till the age of twenty-three years, that so the length of time may more than make amends for the usual sums that are given to handicraftsmen with such apprentices.

"That those also in the hundred who keep in their hands land of their own to the value of £25 per annum, or upwards, or who rent £50 per annum or upwards, may choose out of the schools of the said hundred what boy each of them pleases, to be his apprentice in husbandry on the same condition.

"That whatever boys are not by this means bound out apprentices before they are full fourteen shall, at the Easter meeting of the guardians of each hundred every year, be bound to such gentlemen, yeomen, or farmers within the said hundred as have the greatest number of acres of land in their hands, who shall be obliged to take them for their apprentices till the age of twenty-three, or bind them out at their own cost to some handicraftsmen; provided always that no such gentleman, yeoman, or farmer shall be bound to have two such apprentices at a time.

"That grown people also (to take away their pretence of want of work) may come to the said working schools to learn, where work shall accordingly be provided for them.

"That the materials to be employed in these schools and among other the poor people of the parish be provided by a common stock in each hundred, to be raised out of a certain portion of the poor's rate of each parish as requisite; which stock, we humbly conceive, need be raised but once; for, if rightly managed, it will increase."

School of Industry at Lindfield.

In the year 1834, Mr. William Allen,* Secretary of the British and Foreign School Society, began at Lindfield, Sussex County, an Industrial School for the children of agricultural laborers, which had great influence in demonstrating the practicability of engrafting manual labor in some form into the daily routine of schools, especially for *vagrant children*.

The proprietor had published, in 1830, a little tract, *Hints for establishing Schools of Agriculture*, drawn from Fellenberg's experience, and in 1835, he adopted the plan himself, by making provision for boarding, lodging, and clothing twelve boys on the manual labor system. This school has been in successful operation ever since, and is now being enlarged. One great point is, to bring up the boys in habits of industry and particularly in the knowledge of agriculture; they are employed about five hours a day upon land, when the weather permits, under the immediate inspection of a person well skilled in husbandry; when they cannot work out of doors, some of them are employed in weaving linen, some in the printing office attached, some in shoemaking, &c.

The boys are taught to do everything for themselves as far as practicable; they make their own beds, keep their apartments clean, assist in cooking, clean their shoes, &c.

Each of the twelve boys has a little apartment to himself, about eight feet square, and ten feet to the ceiling, in which is a bed, a chair, and a table, of course; they each have a separate bed, no two boys in the establishment being suffered to sleep together.

Each boy has a garden, consisting of twenty-six rods or perches; two of which he may cultivate in flowers, or what he likes; twelve rods are for potatoes, and twelve for corn. The expense for manure, &c., is charged; but this being deducted, he receives the rest for pocket money. The average last year was 1*l.* 6*s.* 8*d.* each, or more than 6*d.* per week.

The boys are instructed in the most effectual means for supplying the necessities and comforts of life by the cultivation of the land on the spade or garden plan. These boys, beside reading, writing, and arithmetic, are taught English grammar, geography, the use of the globes, land measuring, and such other branches as are found practicable.

A book is kept, in which the master notes from time to time the conduct and progress of each boy; care is taken that they be well instructed in the evidences of the Christian religion, and in the Bible.

Each boy is made to keep a diary, in which he enters the time spent in each of the objects of his study. An examination generally takes place every month or six weeks, when a summary of the diaries is made, and the progress of each is noted; reference being had to the conduct book.

The persons employed in the establishments are: a superintendent, who is also a teacher; a school-master; a school-mistress; an infant school-mistress; a laborer in agriculture, who works with and teaches the boys.

As the peasants, in general, are so ignorant of the value of education, that they will keep their children from school if they can get employment for them that will bring in a few pence, the proprietor of the schools gives a shilling a week to such boys as will work for a certain number of hours on the land, and go to school for an equal number of hours. This plan has completely succeeded; the value of the labor being found equal to the shilling per week, so that the schooling is a clear gain to the boy.

All the boarders who are old enough to have the care of a boy's farm, each consisting of three-quarters of an acre, and divided into twenty-four parts; each part or division being five rods. There are now fourteen such farms, and the things cultivated are precisely those recommended in a pamphlet called "*Colonies at Home*," first published by the proprietor in the year 1838 under the name of "*The Three Acre or Handicraft Farm*;" so that each boy's farm is exactly the fourth part of a farm on which a weaver, tailor, shoemaker, or any other handicraft might be carried on in connection with agriculture.—BARNARD'S *Common School Journal*, 1839.

* See Memoir of William Allen, one of the Proprietors and Founders of Savings Banks, in Barnard's *Journal of Education*, Vol. X, p. 365.

INDUSTRIAL ELEMENT IN EDUCATION.

Manual Labor School at Ealing.

PROF. BACHE in his Report to the Trustees of Girard College on Education in Europe, in 1886, describes the Manual Labor School at Ealing, the expense of which was borne by Lady Byron, as follows:

The Model Industrial School at Ealing, a village almost five miles from London, is an attempt to adapt the spirit of the Swiss rural schools to the circumstances of the English peasantry. "Its leading principles are, that the children should early acquire habits of patient industry; that they should be acquainted with the value of labor, and know the connection between it and property; that they should have intelligence, skill, and an acquaintance with the objects by which they are surrounded; that the higher sentiments, the social and moral part of their being, should receive a full development."

Habits of industry are promoted by laboring in the garden attached to the school-house. This is divided, one portion being reserved for the use of the school, another being subdivided into small gardens for the boys. The pupils work in the first under monitors, and receive a compensation in proportion to the useful results of their labour. The second they hire at fixed rates, and dispose of the produce as they please, always receiving, however, the market price for it from the school, if they choose to dispose of it there. The younger children are not allowed to undertake gardens on their own account, but work for others or for the establishment. Partnerships are sometimes formed among them for the more advantageous cultivation of larger pieces of ground. At the period of my visit, the gardens were planted with vegetables and flowers, and many of them tastefully arranged. All exhibited an appearance of neatness, and during the hours of work the renters appeared busily occupied. The best order reigned among all the children. An occasional simple song was sung in the group who were working for the school, under the direction of a monitor. The master directs the whole, and to his suggestions they are indebted for many improvements; it is their privilege to resort to his counsel in cases of difficulty. The school furnishes the working-tools, which for the youngest children are merely a hoe and rake. They have also indoor work for bad weather, consisting of carpentry, the making of wooden shoes, etc. I was told that the room for containing their gardening-tools, where there is also a trough for washing, had been fitted up by the pupils, and they have shown considerable ingenuity in the repairs of the out-houses attached to the school, and have even entirely constructed one of them. In the beginning a gardener was employed to teach the boys, but this is now done by the master and monitors. An account current with each pupil is kept, in which he is charged with the rent of his ground, and the seeds and plants which he has purchased from the stock, and credited with the produce which he has sold to the school. Some of the pupils have a considerable surplus on the credit side at the end of the year; one lad is stated to have gained nearly ten dollars from a sixteenth of an acre; another, of thirteen, to have gained nearly five dollars and a half, from the gardening between March and November; another, of fourteen, five dollars; and a third, of eleven, the same sum. It is the duty of the master so to arrange that the pupils may not lose, unless by providential circumstances; not to intrust, for example, a youth with the charge of a garden before his capability to manage it is sufficiently proved; and not to allow extravagances or glaringly injudicious measures on the part of the little gardeners. The tendency of these measures is, incidentally to train to habits of respect for property, of honesty, fair dealing, and mutual assistance, quite as valuable as those of industry. The time employed in manual labor by the elder pupils is three hours, and to this is added three hours and a half of intellectual instruction. The younger boys are four hours and a half in school.

CHILD LIFE ACCORDING TO CHRIST.

BY REV. STOPFORD A. BROOKE.

"FOR OF SUCH IS THE KINGDOM OF GOD."*

It is a happy thought that the children who climb upon our knees are fresh from the hand of God, living blessings which have drifted down to us from the imperial palace of the love of God, that they still hear some of the faint notes of the music of God's life, still bear upon their faces traces of the uncreated light. Heathen sage and Christian poet have enshrined the thought, each according to his knowledge, and though there is no proof of its truth, yet we cannot neglect as quite fruitless in wisdom so widespread an intuition. It is vain to sneer at it as poetry, in vain at least for some of us. He cannot scorn this thought who feels, as his children's faces light up at his coming, not pleasure only, but an inner sense of gratitude that things so pure, so close to God, should give to him, with the sense of his unworthiness deep within, so much and so unsuspectingly. Their trust seems to carry with it something of the forgiveness of Heaven. The man sees the tolerant tenderness of God his Father in the child whom He has sent him—that his little one believes in him, bestows on him the blessing of an ever-renewed hope.

Nor can he scorn this thought who on philosophic grounds believes that all living beings are held in God, are manifestations of part of the Divine thought. He knows that a phase of that idea which God has of the whole race is incarnate in his child, that his child is destined to reveal it, that this is the purpose for which God sent it into the world. Therefore hidden within this speck of mankind he recognizes a germ of the Divine essence which is to grow into the harvest of an active life, with a distinct difference from other lives.

And if, born of these two thoughts, a sadness succeeds the first touch of joy and gratitude, when the parents think how soon the inevitable cloud of life will make dim the heavenly light; how long, how evil, may be the days of their child's pilgrimage; how far he may retreat from God—yet, we who believe, not in a capricious idol of power, but in a just Father who loves—we who hold that there is nothing which is not in God, cannot distrust the end. Our children are in His hands; they will some time or other fulfill the work of revealing God; they *must*, for God does not let one of His thoughts fail. If all life be in God, no life ever gets loose from God; it is an absolute imperative of the philosophy which denies that anything can be which is not of God, that nothing can ever finally divide itself from Him. Our children, like ourselves, are already saved by right. Years of what we call time will be needed to educate them

* *Child Life*.—A Sermon preached in St. James' Chapel, London, by Rev. Stopford A. Brooke, Chaplain-in-Ordinary to the Queen. "Suffer little children to come unto me, and forbid them not: for of such is the kingdom of God."—*Luke xviii, 16.*

into union with God in fact, but that end is as certain, if God exist, as God's existence.

This thought of what I may call the divinity of childhood is still further supported by the exquisite relation in which Christ put Himself to children. The heart of woman will never forget that beautiful wayside story where He consecrated the passion of motherhood. The religious spirit will never cease, when disturbed by the disputes of the worldlier life, to remember his words when, bringing the disciples back to the sweetness of early charity, He took a child and placed it in their midst. The soul distressed with questions of belief remembers with a touch of peaceful pleasure how Christ recalled his people to the natural simplicity of faith, to that higher and deeper religion which lives beyond the wars of the understanding, when He said, "Whoso shall receive one such little child in My name receiveth Me."

And when mistaken religious persons press hard upon the truth and tenderness of the relation of parents to children, and bid the one look upon the other as children of the devil—corrupting with their poison the sweetest source of feeling in the world and the love which of all human love links us closest to the heart of God, we fall back in indignant delight upon the words of the Saviour: "Take heed that ye despise not one of these little ones; for I say unto you, that in heaven their angels do always behold the face of My Father which is in heaven."

And once more, when we think that God revealed Himself in the childhood of the Saviour, the thought of the divinity of childhood becomes still more real. To us it is much, in our stormy and sorrowful life, to think of Christ in his manhood conquering and being made perfect through suffering; but when we wish to escape into a calmer, purer air, we turn from the image of our Master as "the man of sorrows and acquainted with grief," dear as that is to us, and look with infinite pleasure on the earlier days at Nazareth, imagine Him playing in the meadow and rejoicing in the sunlight and the flowers, taking his mother's kiss, and growing in the peace of love—and so learn to dream of God, revealed not only as the Eternal Father, but, in some not unworthy sense, as also the Eternal Child.

It is a thought which bathes all our children in a divine light. They live for us in the childhood of Christ; they move for us and have their being in the childhood of God.

In the directest opposition to all this—to the poetic instinct of Greek and Christian poetry and philosophy, to the natural instincts of the human heart, to the teaching and acts of Christ, to the revelation of God in childhood—is the dreadful explanation which some have given of original sin. Children are born, we are told, with the consummate audacity of theological logic, under the moral wrath of God, are born children of the devil. I have already denied this from this place, and stated instead of it the fact—that we are born with a defective nature which may and does lead to moral fault, but in itself it is no more immoral than color-blindness. I have said that this imperfectness is the essential difference of human nature; that which makes man differ from God, from angels, from brutes; that which makes him, so far as we know, the only being in the universe

capable of progress. It is a defectiveness distinctly contemplated, distinctly initiated by God, who wished for a being in His universe the history of which should be the attainment of perfectness through struggle and defectiveness. As such, the defectiveness of our children, as well as our own, has in it a thought which glorifies it. We see in it: first developments, and in the way in which the spiritual element meets it, the beginning of that noble struggle in which the soul will have the glory and pleasure of advance, the delight of conquest as well as the misery of failure; the interest of a great drama, and the final resurrection into freedom from weakness, error, and restraint.

Whatever way we look, then, upon our children, our first feeling should be reverence for the divine within them, infinite desire to help them to recognize that divine idea, and to express it through life, in a noble form. This should be the basis of education. If it were, we should have less bad men and bad women.

For we should remember that children on whom we can make almost any impression we please, so ductile is their wax, will become what they are believed to be, will reverence their own nature when they feel that it is revered, will believe that they are of God, and know and love him naturally when they are told that God is in them.

But the other basis of education has an irresistible tendency to degrade them, and it only shows how near they are to God that it does not degrade them more. What conceivable theory is more likely to make them false, untrustful, cunning, ugly-natured, than that which calls them children of the devil, and acts as if the one object of education was, not to develop the God within them, but to lash the devil out of them? Let them think that you believe them to be radically evil, and the consequences be on your own head. You will make them all you think them to be. Every punishment will make them more untrue, more fearful, more cunning; and instead of day by day having to remit punishment, you will have to double it and treble it, and at last, end by giving it up altogether in despair, or by making your child a sullen machine of obedience.

Instead of trusting your child, you will live in an atmosphere of constant suspicion of him, always thinking that he is concealing something from you, till you teach him concealment and put lies in his mouth and accustom him to the look and thought of sin; and then—having done this devilish work and turned the brightness and sweetness of childhood into gloom and bitterness, and having trodden into hardened earth the divine germs in his heart—what happens? You send him into the world already a ruined character, taught through you to live without God in his soul, without God in the world, to believe in evil and not in good.

Do not complain afterwards if he disappoint you, if he turn out a cruel, or a dishonorable, or a miserable man. It is you who have made him so, and God will have a dreadful reckoning with you. "I mistook," you will say, as you tremble before His judgment-seat; "I did it for the best." Alas! there will be no possible excuse for you, but this, which links you with the slayers of Christ, "Father, forgive me, for I knew not what I did."

Teach your children to believe in the goodness of his nature, in his nearness to God. And this leads me to the first characteristic of childhood, faith: faith, the quality whose outward form is trust.

It speaks well for the beauty of the human quality of faith that it is so lovely a thing to us when we see it pure in childhood. No pleasure is so great as that which we receive when, in their hours of joy, still more when sorrow or disease attack them, we see the light of our children's faith in us shining in their eyes.

It speaks well for the spiritual power of this quality that it has on us such winning force. We grant to it as we recognize it, what we should grant to nothing else—we cannot hold back from its often mute request anything which is not wrong for us to give. It overcomes the world in us: it leads us to make a thousand sacrifices. It charms our weary life, it attracts and softens our stolid heart. It makes us feel our own relation to God, and what it should be, for it is its earthly image. The parents who have not encouraged and loved this quality in children towards themselves, will have but little of it in their own relation to God. They will give no pleasure to the Divine Father, they will have no natural power with Him.

Having this faith, the child is, as long as it is unspoilt by us, fearless, and fearless under the difficulties of a vivid imagination, not the high imagination which composes images towards an artistic end, but the untutored quality which works without an impulse or an aim. On the child's receptive heart everything makes a strong impression, numberless images are received. And at night, when no new impressions are made by outward objects, these images rise up a thronging crowd in the brain. And the work of the brain, just beginning to learn itself, and as yet under no ordinance of the will, composes, combines, contrasts these images into a thousand fantastic forms.

Spoil the child's faith in the world being good to it and pleasant; frighten it with falsehoods to keep it quiet, tell it a single lie, and let it lose a grain of its divine trust in you; show yourself violent, unreasonable, harsh, or cruel, and every one of these images may take a frightful form. What it has suffered from you, the distrust it has gained from you, will creep like a subtle element of fear into the creations of its fancy, and terror is born in its heart.

Again, this unquestioning faith makes the child think that everything is possible, and as many things are possible which the fear which reasons deters us from attempting, the child often does feats which astonish us. So nations in their childhood, and men inspired by intense faith, have believed in themselves and done things called miraculous.

It is unwise to attack too rudely even this self-confidence of childhood. Lessen the child's faith in his own powers, and you will check the growth of that happy audacity which in boyhood and youth wins afterwards so much—that easy daring and self-confidence which, when it is limited by good manners, is so charming in society.

Nature herself will teach him humility soon enough, and you had better let him find out his limits in this direction for himself. She has a way of teaching which is irresistible; which, though it stops audacity with firmness, yet shows that she is pleased with the audacity; which points out a way of conquering herself. And in the child's relation to his home and society, you yourself can check the fearless self-confidence when it degenerates into impertinence or thoughtlessness, not by harsh rebuke, but by

appealing to the natural impulse of affection. The limit placed by saying and enforcing this—"Do nothing, my child, say nothing, which will give pain to others"—is not a limit which will crush the natural boldness of the heart. It is a limit which appeals to love, and the desire to be loved is an element in the child's nature as strong as faith. It will be seen to be natural and reasonable: it will be accepted.

Again, as to this faith in its relation to God, how does it take a religious form? The child's religious faith is, first, faith in you—mother, father, guardian; to early childhood you are God. And when you come to give a name to the dim vision of the growing child, and call it God, it will grow into form before him, clothed with your attributes, having your character. If the child learns to worship an idol—a jealous, capricious, passionate God—it is not his fault half so much as yours. What were you to him when he was young? Were you violent, sulky, exacting, suspicious, ruling by force and not by love? Whatever you were, his God in boyhood will wear your shape and bear your character, and he will grow like the character he contemplates. As he grows older, he needs more direct teaching. He asks who is God, what is His character, what His will. For He cannot but desire to know these things, through a vague curiosity, if through nothing more. For by and by, God touches him. Spiritual impulses, slight, but distinct, come to him in hours of temptation; voices make themselves heard in his heart; passion renders life exalted, and in the more wakeful state it genders, the germs of spiritual life push forth; nature speaks her dim message in some lonely moment on the hills or in the wood, and he is conscious of an undefined want. What has he to fall back on then? What ideas have you given him to which he may now fly for solution of the growing problem? what forms of thought which the new powers of spiritual faith and love may breathe upon and make a living God? The whole spiritual future of his youth then trembles in the balance. Fathers and mothers, you do not know often what you are doing; what misery, what bitterness, what hardness of heart, what a terrible struggle, or what a hopeless surrender of the whole question you have prepared for your child by the dismal theology and the dreadful God, and the dull heaven, which you have poured into the ear of childhood. Long, long are the years, before the man whose early years have been so darkened can get out of the deadly atmosphere into a clear air, and see the unclouded face of God.

So far for the faith of childhood; on its love I need not dwell, the same things apply to it as apply to faith; but on its joyfulness and the things connected therewith we speak as we draw to a conclusion.

The child's joy comes chiefly from his fresh receptiveness. His heart is open to all impressions as the bosom of the earth is to the heavenly airs and lights. Nothing interferes to break the tide of impressions which roll in wave on wave—no brooding on the past, no weary anticipations of the future. He lives, like God, in an eternal present. The world is wonderful to him, not in the sense of awaking doubts or problems, but as giving every moment some miraculous and vivid pleasure, and it is pleasure in the simplest things. His father's morning kindness makes him thrill; his food is to him the apples of paradise. The sunlight sleeping on the grass,

the first fall of snow in winter, the daisy stars he strings upon the meadow, the fish leaping in the stream, the warm air which caresses his cheek, the passing of the great wagon in the street, the swallows' nest above his bedroom window, the hour of rest at night, and his prayer at his mother's knee—all are loved lightly and felt keenly, and touch him with a poetic pleasure. And each impression, as it comes, is clothed in simple words—words which often, in their spontaneousness, their fearless unconsciousness, their popular quality, their fitness for music, have something of a lyric note, something of the nature of a perfect song. For the child lives in a world of unconscious art. He is fearless in his delight, and when he is happy he trusts his own instincts as revelations: and if we could get back in after-life something of this, we should all be artists in heart. One knows in the highest genius that, united with manhood's trained power of expression, there is an eternal element of childhood. Take, for example, the perfect song, such as the songs of Shakespeare were. They were spontaneous, sudden, popular, simple, and able to be sung. But above all, they derive their magic and winning power from the poet's fearlessness, from his trust in, and his delight in his instinctive emotions. The songs of other poets are spoiled by their fear of their simplicity being called absurd by the public, by that doubt whether the thing is quite right, that thinking about thought, that shyness of one's own feeling which come from want of that unconscious trust in his rightness and delight in it which a child possesses. The kingdom of a perfect song, the kingdom of a perfect work of art, is like the kingdom of heaven, one must enter it like a little child.

"Fostered alike by beauty and by fear," fear which has its thrill of joy, the child grows into union with the world, and into consciousness of his own heart, till "the characters of danger and desire" are impressed upon all outward forms, and day by day more vividly that great enjoyment swells which makes

The surface of the universal earth
With triumph and delight, with hope and fear,
Work like a sea.

And in quieter moments, calmer pleasures are his—pleasures of love given and received, pleasures of childish friendship, pleasures of first successes in learning and in new pursuits, pleasures of obscure feelings just touched, not understood, which make in after-life

Those recollected hours that have the charm
Of visionary things, those lovely forms
And sweet sensations which throw back our life,
And almost make remotest infancy
A visible scene, on which the sun is shining.

We look back on them with reflection, but there was no reflection, or but little, then; the life was natural, unthoughtful, only now and then, amid the full movement of unconscious pleasure, flashes of deeper thought arose and passed away, a faint touch of something to come, a weight within the pleasure, a dim sense of sublimity or calm, a suspicion of what duty meant, just came and were forgotten, but did not die. They went to form the heart, to build up that which was to become the man, and they arose afterwards in maturer life to impregnate and to elevate the mind.

We spoil all this divine teaching of God and nature by forcing the child out of his unconsciousness into self-consciousness, by demanding of him reflection, by checking the joy of his receptiveness by too much teaching, too much forcing. Let him remain for a time ignorant of himself, and abide in his heavenly father's hands; let him live naturally, and drink in his wisdom and his religion from the influences which God makes play around him. Above all, do not demand of him, as many do, convictions of sin, nor make him false and hysterical by calling out from his imitative nature deep spiritual experiences which he cannot truly feel. Let him begin with natural religion, leave him his early joy untainted, see that he knows God as love and beauty and sympathy. It is horrible to anticipate for him the days, soon enough to come, when sorrow and sin will make of life a battle, where victory can only be bought by pain.

But if we keep these early days pure and joyful, full of the blessedness of uninjured faith and unconscious love, we give to the man that to which he can always look back with hope, and use for the kindling of effort and aspiration. For the dim remembrance of their pure and powerful pleasure, the divinity within them, have virtue to recall us in after-life, when high feeling is dulled with the cares of this world, to loftier and better thoughts; to nourish and repair imagination when its edge is blunted by distress and doubt; to exalt the soul with hope, that though innocence is lost, yet goodness remains to be won; to tell us, in the midst of the transient and the perishable, that our life is hidden in God, and our spirit at home in immortality. It is true that inimitable innocence, that perfect trust, that belief that nothing is impossible, that fresh and honest freedom, that divine joy, cannot be the blessing of the man. He has been driven out of Eden, and the swords wave forever over the gate and forbid return. But there is a nobler paradise before us, the paradise of the soldier spirit which has fought with Christ against the evil, and finished the work which the Father has given him to do. There the spirit of the child shall be mingled with the power of the man, and we shall once more, but now with ennobled passion and educated energies, sing the songs of the fearless land, children of God, and men in Christ.

It is true that, tossed with doubt, and confused with thoughts which go near to mastering the will, we are tempted to look back with wild regret to the days, when children, we dreamt so happily of God, and lived in a quaint and quiet heaven of our own fanciful creation, and took our dreams for realities, and were happy in our belief. But after all, though the simple religion is lost, its being now more complex does not make it less divine; our faith is more tried, but it is stronger; our feelings are less easily moved, but they are deeper; our love of God is less innocent, but how much more profound; our life is not so bright in the present, but its future is glorious in our eyes. We are men who know that we shall be made partakers of the child's heart towards our Father, united with the awe and love and experience of the man. And then, through death, again we enter the Imperial palace whence we came. We hear the songs and voices which of old we heard before we left our home, but we hear them now with fuller, more manly comprehension; we see again the things which eye hath not seen, but our vision pierces deeper. We worship God with the delight of old, before we went upon our Wander-Year, but the

joy is more stately, for it is now the joy of sacrifice; and all things now are new to us, for we have grown into men, and we feel the power and joy of progress. But never, as we look to Him who led us all our life long until this day, shall we lose the feeling of the child. Through all eternity the blessing of the child's heart shall be ours. In the midst of our swiftest work, in the midst of our closest pursuit of new knowledge, in the midst of all the endless labor and sacrifice of the heavenly life, we shall always turn with the sense of infinite peace to God, and say, Our Father, suffer a little child to come to Thee.

THE GREEN PASTURES.

I WALK'D in a field of fresh clover this morn,

Where lambs play'd so merrily under the trees,

Or rubbed their soft coats on a naked old thorn,

Or nibbled the clover, or rested at ease.

And under the hedge ran a clear water brook,

To drink from, when thirsty or weary with play;

And so gay did the daisies and buttercups look,

That I thought little lambs must be happy all day.

And when I remember the beautiful psalm,

That tells about Christ and his pastures so green,

I know he is willing to make me his lamb,

And happier far than the lambs I have seen.

If I drink of the waters, so peaceful and still,

That flow in his field, I forever shall live;

If I love him and seek his commands to fulfill,

A place in his sheep-fold to me he will give.

The lambs are at peace in the fields when they play,

The long summer's day in contentment they spend;

But happier I, if in God's holy way

I try to walk always with Christ for my friend.—*Mrs. Duncan.*

THE CHILD'S DESIRE.

I think, as I read that sweet story of old,

When Jesus was here among men,

How He called little children as lambs to His fold,

I should like to have been with them then.

I wish that His hands had been placed on my head,

That His arms had been thrown around me,

And that I might have seen His kind look when He said,

"Let the little ones come unto me."

But still to His footstool in prayer I may go,

And ask for a share in His love;

And if I thus earnestly seek Him below,

I shall see Him and hear Him above,

In that beautiful place He has gone to prepare

For all that are washed and forgiven;

And many dear children are gathering there,

For such is the kingdom of Heaven.—*Mrs. Luke.*

FRÖBEL'S SYSTEM IN CONGRESS OF PHILOSOPHERS.

SESSION HELD AT FRANKFORT-ON-THE-MAIN, IN OCTOBER, 1869.

INTRODUCTION.

The Congress of Philosophers first met at Prague, on the call of Prof. von Leohnardi, of that University, on the 26th of September, and continued in session till the 4th of October, 1868.* There were fifty-five members present, and one hundred more responded in letters of sympathy, representing the prominent chairs of philosophy in European Universities. It had a section of Pedagogy in which, among other phases of education, Fröbel's system and the Kindergarten were discussed. The meeting decided to hold a second session in October and November, 1869. In May, 1869 a circular was issued in the *Augsburger Allgemeine Zeitung*, in which due prominence is given to the Pedagogical section.

True philosophy, as an educator, is ever active to clear away the barriers that stand in the way of clear, unbiased comprehension of science and life in their relations and integrity. Philosophy raises the banner, not of any one special science, but of human culture, and however regarded by the materialists of the day as a foolish pursuit, it is the only basis of rightful education—nothing less than which has been the aim of all the eminent educators of our time, such as COMENIUS, PESTALOZZI, DIESTERWEG, FRÖBEL. So far as the General German Teachers' Convention and the Austrian Teachers build on the foundations these men have laid, they work for the same ends as the Philosophers' Congress, from which they are only distinguished in this, that they have special educational aims, while the Philosophers' Congress takes into consideration all questions of interest to cultivated persons and society at large. A delegation was sent to the Teachers' Convention at Berlin, asking them to take part in the Congress at Frankfort-on-the-Main; to aid, by word and co-operation, to solve the educational problems of the present, the most prominent of which are the completing and remodeling of the public schools, especially the establishing and reorganizing of Kindergartens, in accordance with the spirit of FRÖBEL.

One problem to be solved in the establishing of a philosophical normal school for the training of educators and teachers, by which not only a remodeling and improvement of the primary, but also of the high-schools, shall be attained. Finally they will ask for an improvement in female education, in accordance with the demands of the present time and the vocation of the female sex. As these points are felt to be of importance by every thinking educator, it is believed that all the teachers will meet with confidence and good-will, a convention of thinking friends of humanity, to devise means for its welfare.

The Berlin Teachers' Convention responded favorably, and was present in force at the session held in Frankfort, Oct. 26, 1869.

* We are referred by Dr. Harris, to the *Augsburger Allgemeine Zeitung* for October, 1868, and the *Philosophische Monatshefte*, Vol. I, p. 314, Vol. II, p. 130, 336, 323, 404; and Leohnardi's *Die Neue Zeit* for 1867-8, for a full account of the proceedings of the Philosophers' Congress.

"In the beginning of our century, education needed a new impulse; and it was given by *PESTALOZZI* and *FICHTE* who broke the road for the national education of Germany. But the question, what is the true humane mode of education, applicable to all men every where, comes up anew, and asks for the right means to fulfill its mission.

"*FAIRBRICK FAIRBANK*, the great educational reformer of our era, in his system of education, promises these means. But, as yet, his method has been only partly and inadequately carried out in the widely-multiplying Kindergartens. It asks for a thorough investigation, on the part of scientific men, of the principles on which it is based; and if its claims prove to be well founded, it should be recommended to all governments and communities, and its adoption decreed. In view of the great importance of this question, an educational committee, which counts eminent scientific men among its members, was formed last year in Berlin, during the teachers' convention, for the purpose of taking the matter into consideration; and they are invited to attend the Philosophers' Congress as members, taking active part in it, discussing the general educational questions, and devising means to establish a central normal school for the education of male and female teachers, who may meet all the demands of our time in all directions; and an address to the government and school authorities of Germany for the reform of the normal schools, will be submitted for discussion."

The subjects thus announced in the manifests of the Berlin Teachers' Convention were discussed in the Pedagogical Section of the Philadelphia Congress at Frankfort from Oct. 26th to Nov. 4th, and the conclusions reached in the field of popular education, were embodied in a Report of a special committee of which Prof. von Fichte was chairman. During the session, the Baroness von Marenholtz-Bulow gave four public lectures in Frankfort which were largely attended, and took the initiatory steps for the establishment of a "General Educational Union," which was organized in 1871-72.

PROF. I. H. VON FICHTE, the author of the following Report, was a philosopher and writer of great eminence and remarkable versatility. He was born July 8, 1797, the son of the distinguished philosopher *Johann Gottlieb Fichte*, whose writings and personal influence are world renowned, and who died the 27th of June, 1814. His widow died five years later. The son took his degree as Doctor of Philosophy in 1818, at the University of Berlin, where for a short time he was established as Privat-docent. Later he became a Gymnasial teacher in Saarbrücken, and subsequently in Düsseldorf. For several years till 1840, he was Professor Extraordinary of Philosophy in Bonn. In 1842 he was called to Tübingen as Professor of Philosophy, where he remained till 1863, when he resigned and removed to Stuttgart, where he resided till his death, at the age of 83. He was a voluminous writer upon a variety of subjects, on Philosophy, Ethics, Pedagogics, and Theology, singularly clear, candid, and sensible, earnestly theistic and christian. He founded the journal which bears his name and has reached the 78th volume, and is highly esteemed in Germany and wherever German Philosophy is studied.

THE NATIONAL EDUCATION DEMANDED BY THE AGE,

CONSIDERED IN CONNECTION WITH THE EDUCATIONAL SYSTEM OF FRIEDRICH FRÖBEL.

By Prof. J. H. Von Fichte.*

I. EDUCATION—THE PROBLEM OF THE AGE.

SINCE Pestalozzi's great movement, it has become, at least in Germany, a universally recognized conviction, that only by means of an improved popular education, can the many defects of civil, social and family life be thoroughly corrected, and a better future be assured to our posterity. It may be asserted, still more universally, that the fate of a people, its growth and decay, depend, ultimately and mainly, on the education which is given to its youth. Hence follows, with the same indisputable certainty, the next axiom: that nation which, in all its classes, possesses the most thorough and varied cultivation, will, at the same time, be the most powerful and the happiest, among the peoples of its century; invincible to its neighbors and envied by its contemporaries, or an example for them to imitate. Indeed, it can be asserted, with the exactness of a mathematical truth, that even the most reliable preparation for war can be most surely reached through the right education of physically-developed young men. This conviction also gains ground in Germany; and renewed efforts are now made to introduce gymnastics (*turnen*) into the system of common school education, freed from all cumbersome modifications, and restored to their simple, first principles.

But the problems of national education are far from being limited to these immediate, practical aims. Its workings must not alone cover the present and its necessities; the great plan of national education must comprehend unborn generations, the future of our race, the immediate and therefore the most distant. Finally, man must not be educated for the State alone (after the manner of Greece and Rome), but the highest civil and educational aim must be to lead the individual and the whole race toward their moral perfection. National education must therefore extend beyond the popular and expedient; must construct its foundations on pure and universal humanity, and then raise upon these whatever national and professional wants require. This gradation of requirements strictly held, will prove to be a guiding rule of great importance.

Here now, it may seem—and "idealizing educators" have frequently received such reproaches—as if in these demands, far off, impossible

* Translated by Emily Meyer, with slight verbal alterations and abridgements.

problems were treated of, as if educational utopias were desired, instead of looking after what is nearest and most necessary. And one could say, even with an appearance of right, that inasmuch as we perform what is near and sure, we approach, at least progressively, our highest goal. For national education is a work so comprehensive, complicated and prodigious, that it can be realized only in favorable periods and within very circumscribed limits.

Admitting this last, we hope still to show how directly practical the consideration of that universal question of principle is, and that the education of the present will only reach its aim by beginning at this point. We are undeniably entering a new era. We are preparing to cast aside the last remnants of the middle ages. Inherited rights are precarious, or at least they can claim no legal sanction, while, nevertheless, much in our manners and customs remind us of the past. No one is compelled to serve another, and no individual enjoys in idleness the profits of another man's labor; but for each, labor and capacity are to be the sole supports of his position in life. Thus each is thrown upon his own exertions, and the path of unlimited competition and zealous effort is opened to all.

For this reason there should no longer be a privileged class, but to each, approximately at least, must be offered every thing which belongs to a universal human culture, and what his particular capacities demand or are able to appropriate. Only upon these two conditions can the citizen of the commonwealth be fitted for the future "struggle for existence," to continue equal to the increased requirements, and fulfillably his chosen calling.

This new great principle of the equal rights of all to all which their talents can grasp, demands a plan of education fundamentally renovated and readjusted. In every given case, the education must be strictly proportional to the conditions which the period offers. But it can not be denied, that in the present period this proportional relation has not been reached; yes, there is even danger that it may be missed of, by a mistaken arrangement of details. For this reason, those upon whom the responsibility of educating rests, must recognize clearly the final aim of the same, and prepare it with practical certainty, through all the necessary grades. Above all, therefore, theoretically there must be no vacillation in principles, practically no failure in the correct issues! If we should succeed only in spreading a wholesome light over these two points, we should feel that we had solved our present problem.

Our politicians and State educators differ widely in regard to that aim; and this is the next ground where the struggle should begin. Whoever considers a republic the highest goal to which a State can attain, laments that he sees no republicans around him; these true education must make. But what the republican spirit, in which the people are to be educated, really is, there is no thorough insight. This spirit is the opposite of that which has till now existed, and which sees true freedom

only in a leveling equality, and the overthrow of old authority and social barriers; and above all admits no civil compulsion in education. Each individual must cultivate himself for such practical purposes as he chooses, and as well as he can. Education and its institutions must be entirely untrammelled. As a fitting example we can refer to what is related of North America, where the educational conditions, and the consequent family life, are free in general. The pupil is prepared, as early as possible, to help himself onward, in some form of profitable business. The greatest activity, and the richest accumulation of property, is the aim of each. Though German republicanism may reject these principles, it must still admit that there is consistency in them, and that if the State has no higher aim than to become a great industrial and fiscal institution, an immense phalanstery for the most enhanced pleasures of this mortal life, this purpose is being realized on the other side of the ocean, in a highly practical way, and without unnecessary complications; not, indeed, without already displaying the moral evils which unavoidably accompany its progress, and to which our republican sages persistently shut their eyes.

Those who find their ideal state in old feudalism, in simple submission to the fatherly care of "princes by the grace of God," and see in a full return to such conditions the only safety from the dangers of the present, must also contemplate a reform, indeed a retrograde movement, of the educational system. They will insist upon clinging to old things, even to preserving what is decayed, solely because it is consecrated by authority. Nor are we without example of this; for we find a North German State, betraying a lamentable inconsistency and blindness in settling the most important question of popular education, limits the range and thoroughness of instruction, and thus destroys the germs of its future growth as a State.

These two parties—we have mentioned only their extreme characteristics, while numerous intermediate grades exist—designate only the extreme limits of the antithesis, which touches all the political and social questions of the age. They stand upon the broad field of the literature and opinions of our time, as if separated by a wide chasm, and in irreconcilable hostility. They could, however, by returning to their first, true principles, and acquiring a clearer insight, be brought to recognize each other; and, instead of incessantly quarrelling, be made to acknowledge their relative rights, and work harmoniously upon the common task of improving the education of the people. We consider it not only desirable, but possible, that the work of reconciliation should begin with a true appreciation of popular education, which is the common aim of both sides. By this we mean that the conservatives, who will sacrifice nothing which is sanctified by age and authority, do not see how, in thus destroying, that which in truly valuable and enduring can be preserved. For the new form in which it is to arise more enduringly, does not present itself so distinctly that they can recognize it. This gives

them a right to protest that it is better to retain the oldest positive form than sink into the nothingness of a bare negation; no new form should be introduced which is not at least a full compensation for the old.

On the other side, we see reformers too frequently losing themselves in what is external or unessential. They do not often get beyond empty plans of abolition. They are clear as to what they do not want, but do not perceive as clearly what is permanently to fill the place of that which they reject. They are deeply mistaken if they think, that, in ridding themselves of certain hindrances, they gain creative freedom, the power to erect a positive structure. We can not err, in asserting that most revolutions have failed and become unfortunately retrogressive, because their leaders did not know what they wanted, or at least what they ought to want.

In the first place, it is necessary to understand the past correctly, and to recognize clearly what in it has still a relative right to continue, and what must serve as a transitional basis and means for that which is new and necessary. The law of continuity, of gradual transition, which we see ruling organic life with irresistible sway, has also in all intellectual processes, whether political or social, its highest authorization, the violation of which never escapes punishment. We might call it the educational law of the world's history.

If we may be allowed to presume that, as a general thing, the best thinkers agree upon these fundamental principles, then we may consider the following inference as admitted. It is plain, namely, that the path of this gradual, complete, and peaceful transition from the present into the new period, must take place in the field of education; for in the growing race, the old and new time, the decaying past and vigorously-developing future, meet and are reconciled. And thus in this direction, the decisive truth is proved:

All political and social controversies of the present concentrate finally in the question of education; but not only in regard to what must be done in detail and immediately, but more universally still, in this: What is the only true education, the education worthy of the human being?

This is plainly a psychological-ethical question. It can be decided—with the permission of our practical teachers—only on philosophical ground. Not—and here experience must be our guide—not that a certain philosophical system is to construct for all time, an educational plan which all must follow, but that correct insight into the nature of the human intellect must first fix the nature and the end of all human education, and must at the same time designate the fundamental principles by which the several questions of education and instruction are to be decided. Thus we shall be able to dispose of the final question: Which one, of the now ruling educational systems, is best adapted to the nature of the human mind?

Without prolonging the discussion unreasonably, we can not omit, at least not completely, the psychological questions as to the nature of the soul—what is received from without into its growing consciousness, and on the other hand how much its original capacities contribute to its development. The controversy concerning these psychological principles is by no means concluded, and it can not be even briefly discussed here. It will suffice to point out historically the tendencies which have become prominent, as far at least as they have had an influence upon the science of instruction.

II. PHILOSOPHICAL PRINCIPLES IN POPULAR EDUCATION.

At present there are only two philosophical systems which have had a controlling influence in this direction; those of Herbart and Beneke.

Johann Friedrich Herbart.

Herbart deserves particular attention, because, as he himself confesses, it was his educational studies which incited him to psychological researches. He says, "The incentive to these researches, which are not easy, was my conviction that a great part of the defects of our educational systems was traceable to an ignorance of psychology, and that we must first understand this science, indeed must destroy the blind which we now-a-days call psychology, before we can safely say what work we have performed correctly and what incorrectly in our teachings."

He starts, in his system, with strict consistency, from the conception of the soul as a simple and in itself an unchangeable essence. Intuition may be called acts of self-assertion on the part of the soul, with which it responds to impulses which act on it from without. Consciousness is only the sum of the relations between the soul and the external world.

Out of this arises the necessity of education, i. e., a correct outward influence upon the undeveloped man. For the soul possesses no fixed original capacities; man is only physically a being who brings with him, into the world, the germs of his future shape; on the contrary, his soul may be compared to a machine, constructed wholly and entirely of ideas.

For this very reason, it possesses an unlimited capacity of culture, and this decides, on the whole, the possibility of education. A systematic education should seek to preserve the pupil from ruin, and raise him to inner freedom, by teaching him guiding conceptions and by rousing his intellectual interests, while in the midst of its present life and under its influences, from which it is neither possible, nor advisable to withdraw him;—moral culture is its aim.

The object of education, is "an equally developed variety of intellectual interests," subject to the aim of moral culture. "All must be lovers of every thing, each one must excel in one branch." This is Herbart's highest canon for education and instruction. This signifies, if it is correctly and comprehensively understood, the height to which human cul-

ture can attain. Herbart's premises, in his conception of the soul, we must consider insufficient (why, and why also to the injury of his pedagogical theories, we shall show below), but he has, nevertheless, given us safe guides for education and instruction, in his conception of the capacity of culture and his sharp and unprejudiced study of child and man, and above all, in his psychological observations of the inner gradations, through which the growing consciousness passes, especially those that banish what is injuriously eccentric and extravagant, and preserve what is essential and necessary. We find in almost no work, as far as pedagogical literature is known to us, so many practically comprehensive hints, precepts and warnings, in as small space, as in Herbart's "Outlines of pedagogical lectures." They betray every where, the sharp glance of the experienced teacher which Herbart really was.

The following are the reasons why the principles of his pedagogism do not satisfy us. They are the same which compelled us critically to oppose his fundamental, psychological views. Here we will take note only of what has flowed from his psychological into his pedagogical reasonings, which he has conducted with sharp, steadfast logic.

According to those principles, the conscious condition of the soul, each given moment, is equal to the sum of the conceptions which, through the psychical mechanism, have collected in it, by means of the relations which exist between the soul and other beings; and the course, the change of its conscious condition, is again strictly dependent upon this psychical mechanism. The soul itself is only to be considered as essentially idealless, as the unalterable soul-unit which is roused to self-assertion, by objective influences. Each conscious state of the soul is thus a common product of those two factors, one formal (because it does not disturb the fundamental nature of the soul) self-assertion, on the part of the soul, and one variously composed excitement of ideas, on the part of the object, by which (as a critic of Herbart's theory says) "the definition of objective truth is naturally lost to our recognition."

Each single, so created idea expresses itself in consequence of its opposition to others, as a "force," by which a mutual, greater, or smaller check is caused among the ideas. Through this, motion is first introduced into the mass of ideas, which form among themselves combinations, complications, and groups. The relations between objects and their corresponding ideas are not all equally strong; one displaces, strengthens, obscures the other; the suppressed ideas wait at the threshold of consciousness, until they can rise again and unite with similar ones, and then press forward with combined power. The working ideas, repelled at the threshold of consciousness, waiting only in the dark, we call sensations.

They express themselves, in proportion as their struggles forward are more or less successful, as "desires." Desire becomes will, when it is united to the hope of success. Will is not, according to this definite explanation, a real and acting self-determination, arising out of the funda-

mental nature of the soul, against excitements from without, but only a manifestation of ideas, which forms itself in the soul by means of an involuntary, psychological mechanism. We believe that we ourselves will, but both the will and the belief in it are only the necessary products of the continuously running machine within us. We will, because we must, *i. e.*, because the forward struggling mass of ideas is finally concentrated into the idea of a subject which wills, and an object which is willed. According to this, what is called in common language, fancy, memory, understanding, reasons, desires, will, etc., or what is cited as the supposed faculties of the soul, is only a certain activity, in a certain mass of ideas, the conduct of the ideas toward each other.

The question of the possibility of education presupposes a mutability in the mind of the pupil, in the course of his ideas, which the educator must be able to control, at least under certain conditions. He can direct his attention to those states only, not however to their real subject, which, as soul, is the immutable foundation upon which the intellectual life, *i. e.*, the variety of results occurring in and between the ideas, constructs, ennobles or degrades itself, and in which appear the principal tendencies through which the signs of human nature first become visible.

It follows from this that psychology must become the fundamental science of pedagogy. As pedagogy is first brought to perfection as a doctrine by the aid of thorough psychological knowledge, so again, through the same knowledge alone can educational activity rise to the rank of art. Psychology shows finally the causes of the fluctuations of minds between truth and error, between good and evil, and thus teaches, that a need of education is present in them, and that this is even necessary, in order to plant what is essentially human in the soul.

All educational activity may be divided into the three functions, government, instruction, discipline. The child is born without a will; a personal will is formed gradually in him. During this time, all kinds of disorder and impetuosity make their appearance; it is the business of government to keep these within bounds. What nature teaches by experience and intercourse, is too imperfect and irregular, is scattered and fragmentary. An artistic activity must perfect, arrange, and unite the mass of ideas thus collected. This artistic activity is instruction.

The goal of instruction is not solely or chiefly to be the imparting of knowledge or the acquisition of an outward technical skill, but directly the improvement of the pupil by its means, the most important part of education. Therefore, education more closely defined, is the systematic conception and cultivation of ideas, as the elements of the soul's life, until that "variety of interests" is attained, out of which spring the ability and readiness to will, on the one side, and on the other, "taste," or "moral aesthetic judgment."

Discipline—Self-Education.

The idea of discipline points at something which does not yet exist,

but that is hoped and intended, for the future, to which the pupil must first be led. Discipline is principally applied to the will. It consists in influencing the mind of the pupil, with the view of ennobling him and developing him morally, which can only be done by training his will to be correct and steadfast. Its object is the formation of character. Character is the art of ruling the will, the peculiar individual construction of the inclinations, in their quantitative relations. The subjective part of character is "taste," moral æsthetic judgment, whose office it is to criticise the objective element.

Finally, the highest goal and most perfect success of education is the ability of self-education. Out of the moral-æsthetic power of "conscientious judgment," can arise a pure, unselfish enthusiasm for goodness, united with courage and prudence, through which genuine morality is strengthened into character, and by means of which the individual practices a preserving, restoring and improving art upon himself—self-education.

In accordance with these three aspects of government, instruction, and discipline, special maxims and precepts are developed whose truth and manifold practical value can not be disputed, even though one may not acknowledge these principles. They are emphatically recommended to the earnest consideration of every educator, particularly every teacher, and to constant self trial for his educational deportment. We scarcely presume too much, when we assert that Herbart was the first among all the German pedagogical writers, to introduce order, light, and a comprehensive gradation of pedagogical problems, as also a quiet insight into pedagogical procedures, into the previously fragmentary mass of observations and precepts.

Others followed their instincts, or tradition, and a certain practiced routine, whose results might be successful or not; and this is still generally done. Herbart rejects this entirely; he demands for the whole, an educational art which shall reach back to the first principles of psychological life, and carefully follow its development, thereby founding a soundly arranged, educational art; for details, a constantly conscious, psychologically controlled application of those universal precepts. He has thus laid the foundation of the science of pedagogism.

Nevertheless, there is no contradiction in asserting, that the excellence of these pedagogical precepts is by no means a guaranty for the truth of his psychological first-principles, and for the correctness of his conception of the nature of the soul. For if we look more closely, we do not find that these precepts are deduced from this as a principle, or are simply confirmed by it even, and that they would be untenable without it, but that they are derived from sharp and extensive observation, and thus possess an absolute value, independent of the judgment which one may be obliged to pronounce upon the principle itself.

On the contrary, we might say, as far as the principle has had any real influence upon Herbart's pedagogical theories, it has placed them in

open contradiction to experience. His theory of the formal simplicity of the soul's nature, of its deficiency in all original capacities, has compelled him to exaggerate the work of instruction, and ascribe to it a value which experience by no means confirms. This contradiction does not arise because the educational art recommended by Herbart is a faulty one, but from the deeper and more universal cause, that the nature of the human soul is quite different, more richly gifted, than Herbart, compelled by metaphysical and not psychological reasons, can acknowledge.

According to that principle, of course, education can make what it pleases out of the wholly indifferent soul; it needs only, after its known laws of psychical mechanism, to supply it with correct ideas, in appropriate strength, order, and clearness, in order to make them the controlling ones, in its consciousness, against which the others, conceived by chance and unfit, are powerless. As he holds further, that the human soul is deficient in all original gifts, so it must follow, that, by means of education, instruction, and discipline, each can become what educational art intends to make of him, if only outward circumstances—not inner endowments—allow the completion of the educational work. For, according to these fundamental views, man, in his intellectual permanence and grade of culture, is the product of outward influences, be it of chance, which ought not to be, or of art, which just education must accomplish. Every thing is brought into the empty soul by inculcation. This view can not recognize original talents, fundamental impulses, and various predispositions for one thing and against another; which belongs to the "myths" of the old psychology. On the contrary, we might expect, that, by means of an extensive, psychological calculation, the strength could be exactly stated, which an idea in the consciousness must receive, in order to make it victorious over all others. And on the whole, it would be only necessary to apply that calculation to each pupil correctly, in order to insure the success of instruction. It is scarcely necessary to prove that this collective view of man contradicts collective experiences, and not only, by daily confirmed examples, that the same education produces different results in different persons, which necessarily presupposes the existence of different intellectual preliminary conditions, but more thoroughly still, when we examine the deeper, psychological conditions which make historical, and cultivated progress possible. We can speak of this briefly here, inasmuch as our psychology may hope to have answered the question, by proving a universal individuality. The simple consideration is here sufficient, that what is brought into the intellect from without, by inculcation, can still be only something old and previously existing; that, in admitting that every thing in the soul originates in this way, we deny just that principle which constitutes the signature of all real individuality (genius), the creative, inventive power of the intellect, through which alone all which is important and universally historical, and all progressive cul-

ture, has entered into human history. After this comprehensive observation, it will be necessary to seek also for another psychological basis.

On the other side, nevertheless, the relative or subordinate claims of Herbart's pedagogism can not be denied; and we would like to say the same of it, which our psychological criticism asserted of his conception of the soul; that it is not incorrect, but it is incomplete, and only when it is rightly completed, can it maintain its independent claim.

Here is something perfectly analogous. We can have the utmost confidence in his pedagogical precepts, even though we reject the curious deductions which are a necessary consequence of his conception of the soul; for those have an universal value; we shall even find that they are capable of more varied applications, when we underlay them with another definition of the soul, more in keeping with our experience.

*Friedrich Eduard Beneke.**

Beneke's services consist in having exposed, in a very apt manner, the cause of the one-sidedness which we meet in Herbart's pedagogism. He says Herbart's theory is indeed based upon experience, but the conceptions of experience, in their direct form, appear to him full of contradictions which must be removed, not through an extensive and exact examination of facts, and hence through a more searching experience, but in an artificial way, by means of a logical process of thought. So we see him resume already in the second step, the construction out of mere conceptions of that which he had rejected in the first. He has arrived at his conception of the soul along this path of logical metaphysical construction. Because it is a logical contradiction to think of a reality with several qualities, we should insist upon considering the soul as a strictly simple being, essentially unchangeable, as the really normal unit of the changes which are wrought upon and not by it. For the same empty logical methodological reasons, he has rejected the harmless and even fruitful conception of faculties, instead of determining, by careful observation and treatment of psychical facts, what the soul really is, and what preliminary conditions underlie its growing consciousness. Finally, he has retained, in the spirit of the old psychology, the most universal cultivating form of the already conscious, cultivated soul ("the forming of ideas") incorrectly, as a really original and universal, fundamental form of the same, and operates further with the ideas as if they were real beings, independent of each other.

These critical objections to Herbart's psychology fully account for the principal deviation in Beneke's fundamental pedagogical views. Beneke's dependence upon Herbart has been too strongly and incorrectly intimated. It is none other than that the follower has the right, yes, is in duty bound to criticise his scientific predecessors. One may assert that Beneke's psychology is fashioned intrinsically upon an antithesis to Herbart's, and if his educational precepts do not widely differ

* See *Harvard's Journal of Education*, xxviii, p. 50.

from Herbart's, this may be less a dependence upon him, than a conformity of their practical judgments, which also in Herbart's theory have shown themselves tolerably independent of his own psychological principles.

The cardinal question of all psychological art is this, what does the soul contribute from itself, in its unconscious being, to the process of consciousness, and what comes to it from without?

Beneke answers this question quite differently from Herbart, but we are convinced not searchingly and therefore not in a way that touches upon the real point of difference. He starts from the fundamental thought that the soul is not simple, but consists of a plurality of single powers, and that the abilities of the soul are not at all fundamental powers. All kinds of intellectual activity, as the ideas of the imagination, conceptions, conclusions, etc., are to be considered as derived, from their relation to the sensuous perceptions. For perceptions first furnish the material for the ideas and conceptions; these again are the foundations for judgments and conclusions, up to the most complicated processes of thought. But even the sensuous perceptions are not the first and most simple. Every perception is a complex of sensations and only in these do we possess that which is really original and first in the consciousness. But the ability of the soul "to feel" is not abstract and uncertain, it is divided into sharply defined provinces, into sensations of sight, hearing, taste, etc. And these simple, sensuous powers of feeling must be accepted finally, as that which is truly primitive and inherent in the human soul.

These primitive abilities, however, need a stimulus to awaken them, and thus arises what we call sensation. The soul retains a trace of every action, where the stimulus excites the ability. Accordingly, the forces and abilities of cultivated souls consist of previously excited sensations.

If the stimulus is only sufficient to fill the ability, perception arises; if it is too small for the receiving ability, displeasure; if it is overflowing, the sensation of pleasure; if it is gradually increased to superfluity, satiety and stupefaction; if the superfluity is sudden and strong, pain.

If several impressions, left by perception, are homogeneous and mix, they become ideas. If the same perception is repeated upon different things, it is accepted as common to all things; a conception is formed. All conceptions together constitute the understanding. If a new perception is added to a conception, what is common to both mixes and forms a conclusion; the sum of conclusions is the ability of making conclusions.

Sufficient stimulants furnish clear ideas and thus satisfaction and pleasure; insufficient stimulants form positive dissatisfaction and displeasure. According to the nature of the stimulants, and their results, there arise in the soul, inclination or aversion, propensity and passion. That which affords satisfaction is a treasure which the soul

strives after, the opposite, an evil which it repels. Single endeavors mix, after the law of analogy, and arrange themselves in ranks and groups. These ranks and groups are wishes, and the sum of all the endeavors and wishes of the soul, is the will.

The form of feeling is not in the same degree a fundamental form, as that of ideas and desires. Feeling is based upon ideas, and the difference of the simultaneously and rapidly arising ideas, and the aroused volition, thus appears in the soul as feeling. The difference of the feelings develops with the ideas, and their vivacity is in a correct proportion to the vivacity of the ideas in which they originate. In the greater vigor, vivacity, and susceptibility of the higher senses, which, above all others, create in us those ideas out of which conceptions and conclusions are formed whose contents are both goodness and beauty, lies the reason why feelings for truth, goodness and beauty are found in all men. Therefore, the rank which the individual will win in intellectual culture and moral freedom, depends upon the correct proportion in which the higher senses develop, in opposition to the lower.

This, according to Beneke, is what is common to all men. The individualizing momentum, he places in the various grades of "force" "vivacity" and "susceptibility," with which those original abilities are endowed. Intellectual activity is more or less strong and comprehensive, in proportion to the degree of force, in proportion to the degree of susceptibility, more or less rapid and mobile. In proportion to this vivacity, one person can, in the same time, form and retain a greater number of ideas than another.

But he reminds us at the same time that these three forms of temperament by no means cover equally all inherent, primitive abilities; that, on the contrary, each may have its peculiar fundamental nature, so that the same man may have as many, possibly different temperaments, as he has sensuous original abilities; (a position which single observations seem indeed to confirm, but with which scarcely one psychology, based upon the laws of "psychophysica," and holding fast to the idea of the unity of the soul, can coincide). The aforementioned phenomenon has a deeper source, lying in the individual, fundamental quality of the soul, and in its original, but variously distributable measure of force.

Every degree of susceptibility can originally unite with every degree of force, to which then later acquirements are added; for the soul retains a trace of every thing which is developed perfectly; and in that inherent difference, and in the quality of those traces, in the number and peculiar shapes of these connections, originate not merely the most heterogeneous knowledge, skill, habits, but also inclinations and personal characteristics.

Finally, the individual differences which we meet among men are created and explained by the co-operation of all those traces and the consequent capacities of the soul. This individuality is, in its contents and peculiar construction, the collective result of what is imparted to

the soul from without. The formal energy, the degree of "susceptibility," "vivacity" and "vigor" are all which is inherent. These can be cherished and increased by education and culture, but not extended beyond its original limits. For to what is inherent is added, as individualizing momentum, only the difference of the degree with which the susceptibility meets the different provinces of the senses.

Thus Beneke, in keeping with his principles, completely answers the question, what is inherent in the soul, and what enters our consciousness from without? The cultivated man is not, as Herbart holds, the product of his surroundings, education, and culture; his individuality does not lie in any ideal capacity of the intellect, but in the original differences of temperament. For nothing is inherent in the human soul, except the universal quality of its sensuous foundation, certain degrees of susceptibility, vivacity, and force.

From the preceding outline of psychological theory, one can judge as to what Beneke has contributed to pedagogy. According to him, the educator has no other direct means of influencing the pupil, than through the sensuous sensations and perceptions which he excites in him, either of himself or of other things. This course can have a three-fold purpose; the perceptions are furnished him for their own sakes, or for the sake of the traces which are retained, or for the sake of the inner capacities which, through them, can be awakened and cultivated. To the first and second belong the foundations of all elementary, inner culture; the third includes the combinations and other changes and improvements of that, of which the elements already exist in the soul. The direct influence, considered alone, is essentially the same in the first moments of the child's life as in the latest periods of education, and even beyond, throughout the whole life. Only with regard to what is to be developed from within, do the educational means, which are suitable to different ages, differ.

Beneke recognizes the prominent worth and importance for education of those elementary materials of culture, and imparts at the same time a succession of practically useful precepts for first instruction, which also includes the commencements of training. But these precepts are chiefly of a preventive kind; are rather warning against the mistakes of the previous educational and instructional method, than positive directions how the self-activity of the pupil is to be aroused, early, and in every direction; and they do not reach back, energetically and with clear consciousness, to that starting point of all education, in which we shall find the signal merits of Fröbel's educational thought. Beneke demands for the development of the sensuous sensations and perceptions, that the child should not be burdened and stupefied by over stimulation, should not be urged from one thing to another, thus preventing it from comprehending the details and arriving at a correct contemplation of its sensations; that one should give the child the object itself, rather than the picture or model of it, that one should give him complete in-

tuitions, rather than words, clear ideas, rather than conceptions, altogether what is simple and concrete and thoroughly definite, rather than the abstract and universal. The formation of ideas must also precede the ability to understand, judge and decide; the perfection of the growing understanding depends upon the perfection with which the separate ideas were originally formed and preserved, as "the conception originates only in the attraction of the equal constituents of the single ideas and sensations." Nothing is more injurious to the growth of the understanding, than an inattentive apprehension, a mere heaping up of superficial material. The sooner the abstract working up of the intuitions begins, the less will be collected, the sooner will the material be exhausted. He lays down the universal canon: "Nature means that man should be at first predominantly sensuous, then predominantly reproductive, and then last of all become productive in intellectual things. The educator should not disturb this order."

Who can not, even with wider fundamental views, coincide with this useful, in most points, desirable advice? Beneke, hand-in-hand with Pestalozzi's simple, great idea—to base all instruction upon the development of elementary intuitions, and thus at the same time rouse the self-activity of the pupil—has always sought, through these principles, to promote the cultivation of the higher intellectual capacities, memory and thought; and his influence has certainly been beneficial to elementary instruction in many parts of Germany. For he has found scholars and followers who have defended his principles theoretically, and introduced them into practice.

But what is wanting in his theory of education, what shows it to be unsuitable to become the starting point of a reformatory, entirely re-modeled system of education and instruction, such as the present needs, is, as with Herbart, the faults of his psychology. It is predominantly sensualizing; it has also injured his pedagogism. It does not recognize, or mistakes what is intellectually original in man, his (*a priori*) unconscious, fundamental tendencies. Consequently, it does not gain a complete insight into the organizing centre of all education, and its final goal. According to him, the pupil is born only with the capacity to receive sensuous sensations and intuitions, to cherish them, to unite and separate them in proportion to their similarity and dissimilarity, to cultivate the inclinations to which they have given rise, etc., etc.

The work of education can only be to bring art and rule into this psychological process, which is self-forming, and only defined by outward things. In this, there can be no ideal of education whose purpose is to conduct men toward their common ethical destiny; for the psychological consequences of this theory do not allow of such a common destiny. Each becomes only that which his surroundings make of him, (accidentally or through education). Thus, on the one side, an all-determining success is ascribed to education, which it does not in reality possess; on the other side, its final value is still a subordinate one, for

it concerns only the preparation of the pupil for the position which he is to occupy in life, and not the cultivation of his intellectual individuality. As Bencke's psychology has not paid due attention to this deeper study of man, so his pedagogical principles have not been able to retrieve it; and so the pedagogical debate can only be carried to decisive conclusion upon another, the psychological field.

III. PSYCHOLOGICAL PRINCIPLE IN MODERN PEDAGOGY.

Thus far, our examination shows us two things, the pedagogical question is at all times and in the last degree a psychological one. The previous criticisms have given us the right to turn from the two psychological systems which were, till now, busy in remodeling pedagogism, and to seek another psychological fundamental view of man. The author can not be blamed for returning to his own psychological results, which he has made known in his two principal works upon man, "Anthropology" and "Psychology," as also in his "Ethics." They will be here judged from a new point of view that we may learn if a more successful reform of education may be expected from them, than from previously accepted principles.

At the same time, the curious fact will appear, that what our psychology ought to demand of a future educational theory, is already furnished us in the underlying thought of Fröbel's educational method. Both agree in what we hold to be the decisive starting point of all instructional reforms, while at the same time we must assert, that in both systems, this is not recognized or at least not sufficiently. Education can create nothing in the pupil, can not give him any thing from without; it can only develop into consciousness the talents which he already possesses, by arousing his activity. Only what he has produced in himself and can continue to produce, has an enduring value, for that becomes a constituent part of his conscious being. Every thing else is an accidental or fleeting possession. Education and instruction should concern themselves with this latter only in a secondary degree, for it is only a means for that first and real aim of education.

To realize the extensive importance of this axiom, we must consider the following: No sharp observer of men has ever been able to avoid the reflection, that every human individual, not only in consequence of his manner of living, but already in his earliest childhood, differs distinctly from his companions who have grown up in the same circumstances. It is well known, that children of the same father and mother are quite dissimilar from the beginning; that talents suddenly appear in the sons, of which the parents have never shown a trace, and that, on the contrary, they lack capacities in which their ancestors were rich. A new intellectual element enters into that which is undeniably inherited, beyond the control of the parents, but is still of an origin prior to the consciousness of the individual. In another, the thread of inherited peculiarities is lost, or reappears periodically in the grandchildren. In

this, there is much that is apparently lawless and ambiguous; but the more reliable is the universal fact, that each human being is peculiarly constructed, and not merely a similar sample of his species; that further, this peculiarity does not come to him from without, but is the most original dower out of that region of his being, which precedes consciousness.

It is just as undeniable an experience, that these original peculiarities are never fully extinguished or transformed into others, through life; but that, instead, they are all which is really enduring in the changes of the same, and they peep involuntarily through the highest culture, through the best controlled character, quite perceptibly at least, to the possessor. It is true of the human being, what the poet says,

"No man thou be, canst not escape thyself,
And neither time nor power can ever crumble
The conscious form which life develops."

In more strongly endowed individuals, who on that account are called talented geniuses, this individuality is mostly a prevailing fundamental force, around which, as around a centre, the others gather and support it, or at least, are subordinate to it in strength. This force is never directed towards any thing merely Utopian and unreal; but in deep, inner interchange with the objective world, finds in it its sure complement, which finding, however, does not consist in passive reception, but in self-active appropriation. Every thing intellectually creative and progressive springs from such inherent, fundamental forces.

It may be doubted, and this doubt would be a principal objection to the fundamental view of man which we here defend, if this quality of genius reaches down to the countless crowd of unimportant men, whom experience shows us, at a superficial glance, to be mere samples of the human species only, because of the worthless and disagreeable aspects which sensual impulses and passions have stamped upon them. If this doubt had any foundation, then mankind would be separated by a deep chasm, it would be a strictly divided double race; on the one side, a thinly scattered community of intellectually gifted, progressive geniuses, on the other, a stationary mass, incapable of being intellectually aroused.

The violence of the rent which would be the unavoidable consequence of this supposition, should teach us how daring and untimely such a conception would be. By the unlimited gradations of real culture, and possible capacity of culture, which are visible in the human race, it is actually impossible and contradictory to draw an absolute border line between this side and that one, where genius might still exist, and where it might be completely extinguished.

But experience contradicts this disparagement of the human race still more directly. Where we succeed in approaching the apparently most stupid race of human beings, that which is perverted by entire want of culture, or wholly incorrect culture, near enough to study it closely, we shall discover also in it the first beginnings of a present, or the (ruinous) remnants of a vanished cultivation. Not a tribe is so animalized,

that it is incapable of rising above mere natural needs; every where we find attempts of human invention to improve the purely natural state, with the dimly working impulse, to choose practically among different means; every where we find the beginnings of customs and habits which regulate social life. But even the weakest examples of this humanity can not be thought of, without presupposing a creative capacity, not imposed from without, but originating within, which responds to the willing imitation of the majority of mankind. In short, we must recognize also here a process of culture, small and of limited operation; but so weak and sporadic, that no progressive cultivation like that of the "civilized races" can be developed out of it.

Psychology has treated all this, according to its deep, fundamental conditions, under the names of "active" and "passive," "imparting and receiving genius," sufficiently, to venture this assertion, based upon experience, that individuality is every where present in all human races. And the cherishing of just this element is assigned to education.

This gives a much wider, thoroughly universal significance to education itself. The more advanced civilized races can and must become educators of the backward ones, in a full and real sense; all the activity of foreign missions, all missions to the heathens, ought to have only this meaning and result; *i. e.*, it should offer nothing foreign, or obtrude its own outlived and decaying precepts; but in the first place, develop the universal consciousness of human morality, and then, just as with the child, rouse the slumbering religious feelings, which, in the beginning, should not be in the least dogmatical. On the contrary, it is no secret, how little in accordance with pedagogy the missionaries have performed their high work; and thus it is clearly explained, why they have not succeeded in bringing forth healthy and lasting fruits.

The foregoing shows that the uncertain results of single, "practical" observations, do not suffice finally and thoroughly for a decision upon the cardinal points of culture and education, but that neither does an abstract theory, made up of imperfect premises; that we must inquire of experience, and only of experience, but experience of the widest possible kind. The question is, what are the common fundamental impulses in man?

To develop these, and to bring them into ruling and serving harmony with each other, is certainly the real aim and highest success of education, in the collective people's life, as well as in the narrower province of pedagogy. But this success will first be assured, when the controlling fundamental forces are raised out of the natural form to the level of character, clear insight, and free, conscious will. This self emancipation, this transition from obedience and trusting subjection to authority, to self-education and self-control, education should make its second principal aim, while it prepares the pupil through gradual development for that self-control. The starting point and goal of all education and human culture is thus designated; man's education is never

truly finished, as long as he lives. It should only be withdrawn more and more from outward influences, and enter into original, free, conscious self-determination.

Thus far, however, we have only given the framework of certain universal conceptions, which, as such, can claim to be truthful, but which are practically too abstract and indefinite to afford a basis for educational laws. For that, it is necessary to study more closely our fundamental impulses and their innermost relation to each other, also to discover what "temperament" and what "character" signify, and how the direct natural form of the will may be raised gradually into character. All this, rich and comprehensive as it is, can only be disposed of by scientific psychology. May we be allowed to express the results of our researches in a brief statement?

1. Man enters life, through conception and birth, as a psychical individual, a specifically limited "sensual being," along with other partially similar, partially lower beings, who are endowed with the impulses of this sensual being. Seen in this light, man is only the impulse of self-preservation. It would be insufficient to say he has this, like other transitory impulses. For the uninterruptedly accompanying feeling (consciousness) of himself, changes as uninterruptedly into the impulse of the assertion (preservation) of himself. Therefore this impulse accompanies him with equal certainty through the most various changes and disguises of real selfishness; as its dual form ("individual" and "sexual" impulse) is the most energetic and obstinate. It must therefore, in both respects, become the principal object of watchful educational activity.

That impulse appears in the child with the first signs of life, as yet only in an ingenuous natural form. It is far from conscious selfishness. But because of the feeling of weakness and helplessness, it acts involuntarily, as self-aim, treating every thing else as a means. In opposition to this instinctive feeling for self, education must develop, as early as possible, the feeling of obedience, subjection to foreign authority. It will be shown out of what slumbering capacity this is possible.

As long as the child is growing, and has not attained to the full feeling of his individuality, only one side of the impulse of self-preservation prevails, viz., the impulse of individuality. When the human being is advanced (grown up) to organic full personality, then there comes out upon the dark background of his being, which is based upon the oneness of the sexes, and includes all human individuals, the sexual impulse, the second form of the fundamental impulse. This, however, proves to be the mightiest and most profound form of the self-preserving impulse, because in it, not only the individual, but also the race is affirmed. Therefore, it works as something overpowerful, more than individual, in and through the individual; it destroys involuntarily its reserved self-satisfaction, and compels it to open itself to the completing other, to find first in this union its self-satisfaction,—at the risk of losing

its individuality; so, surely, this inner relation of both impulses announces already upon the plane of temperament, that the solitary individual is without value and importance, and first receives these when it yields self-sacrificingly to the whole, the race.

Now it is most significant, and a strong proof that man, already considered as a sensuous being, is more than a mere sensuous being, that sexual love, in order to preserve the human form, must be feelingly individualized from the heart. The one sex does not seek the other till an individually sympathetic choice takes place. The impulse receives the character of tender inclinations (*gemüthsneigung*), which for good reasons, is most easily recognized and prominent, as a normal appearance, in the sexual love of women.

As the moral fostering of this impulse as a rule lies beyond real education and should be left to self-education, we shall not consider these important and interesting relations in the following remarks. But for the sake of comprehensive completeness, we will hint, that just the tender form of human sexual love should become the means of raising this whole province of feeling into the specially moral one. In marriage, in the family, the whole supplementary "idea of communion," the real principle of morality, is placed in direct, natural form before the eyes of men.

Moreover, we must suggest, and this view is very important, that man is not yet really individualized within the sphere of the impulse of self-preservation, or as a sensuous being. That double impulse is common to all without exception; and it must be so, for it is the strong indispensable foundation, by means of which the individual and the race is able to assert itself; therefore, it is at the same time, the universal condition out of which the other individualizing impulses can spring. The individual difference of that double impulse consists solely in the relatively, greater or smaller strength with which it maintains itself in the consciousness of different individuals, which degree of strength is also original and involuntary. It can indeed be modified by education and culture, but it is always essentially felt, and, where it is strong, needs constant, self-educating watchfulness.

2. Now psychology proves through the presence of "ideas" in human consciousness, that man's individuality is not alone the sensuous and superficial one, whose fundamental impulse and its dependent instincts, as is the case in the animal world, reach their goal and destiny in the double preservation of the individual and species, but that man is at the same time intellectually individualized through the peculiar direction of his knowledge, feeling and will, in which all originally differ. We have called this individuality "genius," and already upon this ground asserted the universality of genius, as a point of experience.

These points of individuality are, therefore, only the realizing means and the matter, in which this higher individuality forms itself. Genius becomes sensualized by these natural conditions, but while it degrades

them to its means, it spiritualizes them at the same time; the human organization is elevated, gradually, to a copy as well as an instrument of the spirit. The former, in physiognomy, glance, voice, in all the bodily motions which mirror the intellectual character; the latter in the practical functions and technical arts, in which the body is practiced; finally, in the control and harmony of the sensuous feelings and impulses, which, being subjected to a spiritual aim of life, cease to claim independent rights and to find their own aim in their gratification. We characterized this as "the making the impulses ethical" (*ethisirung*), and its collective result is what can be called human culture.

The work of leading the growing being in all these ways toward humane culture must begin at the beginning. This work is many sided and makes great demands, but its value is only introductory. It prepares man to become the capable active instrument of 'the idea'; but it does not awaken him to the consciousness of what the nature of the idea is, or in what peculiar form it is represented in his endowments. This is the essential, *positive* work of education, its centre and goal.

For even as genius is that which truly individualizes man, so it is plain that the only purpose of human historical existence, is to develop this genius to its full, conscious realization, at least approximately, and in harmony with the conditions which its earthly existence and particular social position allow.

But there is, in the first place, a highly injurious error to combat, an error which must paralyze all true educational progress, as it would practically serve to justify all the retarding regulations in Germany, which we now lament. It is the almost universal idea, that genius is indeed a very desirable, but only exceptional gift of privileged intellects, of which no trace can be discovered among the majority of men; but that education has only to consider this majority, the average of men. And this opinion is thus further expressed; that if that "highest" measure be applied to education, it would become wholly impracticable, would neglect the common needs, and merge into an extravagant chase after the impossible, in order to satisfy an idealistic phantom. And indeed all the controversies against the "hollow educational theories of the present time," against the "haughtiness" which they nurse in man, against the rebellious spirit which denies all authority and even attacks the sanctified truths of faith, in short, all that which we see in education, state and church rising up against the new reformatory efforts, can be traced back to the common dogma, that the majority of men are only similar samples of their species, who must be led by authority, that nothing savoring of genius, nothing peculiar, can be discovered in them, which would capacitate them for intellectual freedom and independence.

This is really the old, truly pagan illusion, that an impassable division line exists in the human race, which destines the majority to believe, obey and serve, and provides only the few with the right to rule and command. Also, that the *truths of faith* are finished and complete, and

that conscience has only to receive and submissively acknowledge them. Its maxim is, education should prepare the way for this spirit of submissiveness. Formerly and again recently, various means for such educational training, indeed a whole system of directions for it, have been contrived. And even though the wiser rulers and teachers of the present have turned away from the generalities of that principle, they still do not dare to reject its consequences and workings and to clearly confess to themselves that education should strive towards just the opposite goal; to develop the independence and peculiarities of men at all (fancied) risks, and in spite of all difficulties which lie in the way of the fulfillment of this great work.

The way in which individuality is still treated, when it appears, may serve as a proof, that this warning picture is not exaggerated. Where it really forces a path for itself, it can not be killed, but it is willingly allowed only in the impracticable province of art, or in the department of useful and practical inventions. When it seeks to work productively in the state, and church, in science and education, it is considered highly inimical and inconvenient and must expect most obstinate resistance.

3. It will indeed not be easy to extirpate these fatal and far reaching errors in their principle and its roots. It can only be done, finally and completely (which must be said, even though it will not be willingly heard), through philosophical culture, by exhaustive psychology and ethics, inasmuch as these actually prove, by a complete exposition of all the forms of genius (individuality), that in this genius alone lies the true and most effectual incentive to all the intercourse among men, which is not based upon direct sensual aims. Only because men's original capacities are intellectually different, are they involuntarily and constantly urged to mutual completion, even to the intercourse of the sexes. Altogether, each can arrive to full self-development only in supplementary association with others, influencing and being influenced by them. This is because others are able to offer them something peculiar, and also to receive the like from them, *i. e.*, it is because of the originally different endowment of each, or as psychology expresses it, the relative "productive" and "receptive" genius.

Further still this mutual devotion is the source of true morality. Men can enduringly and successfully conquer this most mighty, continually wakeful power within, this impulse of individuality (self preservation impulse) only by being compelled to subordinate and sacrifice himself for the good of others and the community. Only the mightier incentive, the higher love, is able effectually to weaken and obliterate the lower.

But just this becomes the most enduring spring of man's self satisfaction, objectively of his perfection, subjectively and in the feeling of this perfection, of his felicity. It is so continually affirmed by experience, that this can be found, not in hollow brooding over one's self, or in selfish plans and velleities, but alone in devotion to the community and in enthusiastic love for it, that it needs here no further proof. That com-

munity is, therefore, with all which depends upon it and all which it helps to realize, the objective good for all, and for each, in a peculiar way his own good, the source of his perfection, of his morality, of his felicity.

4. If now beyond all doubt the true goal of the collective education of youth, and of every continued self-education, is only to be found by making the individual more fit for that ethical intercourse, it follows that this can be done on principle and primarily, only by developing his intellectual faculties on all sides into consciousness, into free conscious possession and enjoyment, or, as ethics more clearly and universally expresses it, by raising man out of the form of temperament, which is servile and instinctive, into that of character, which is conscious and self-recognizing. The forming of character in a word in that universal and pregnant sense, is the only goal of all education and the certain result of a successful one.

Every other principle of education be it wholly or only partially at variance with these views, should be rejected as false, or at least insufficient. This conception can also serve as a critical rule, by which to classify previous instructional theories, according to their worth or worthlessness. For one who has not the richest and deepest conception of man, can not grasp fully, and not in its depths, the work of his education. Let it not be considered presuming, therefore, if we are obliged to assert, supported by those philosophic fundamental views of man, that the highest precepts of education have not yet been discovered, or if discovered, have at least not yet been referred to their final clearly conscious principle.

It can not be denied that the instinct of genius, a sure practical glance, has often hit upon the right thing; indeed it should be emphatically recognized. If it is demanded, which demand certainly can not be refused, that this partial success be insured, that the fundamental thought contained in it be raised to its full and enduring recognition and at the same time be realized for all pedagogical needs, this can be attained only through clear insight into principles, and the greater portion of this work is still left for the future to do, but for a future which may begin immediately; for that highest principle is discovered, at least on the part of philosophy through the theory of the universality of genius.

IV. THE DEVELOPMENT OF THE GENERAL PRINCIPLES OF ALL EDUCATION.

On another occasion we ventured the assertion, that the theory which we represent, is the first which, at least through its principle and with the decided consciousness of its opposition to all previous views, is qualified to found a science of the intellect, suitable to the present Christian plane of the world. For what it proves of the endowment which, previous to all experiments, lies in every human being, and which is destined to leave its concealment and appear in the light of consciousness, is precisely the same which the Christian faith has announced as its fundamental truth, which on the contrary was and always remained inaccessible to

the ancient world, in oriental culture and in the reasonings of the classical people; that *all* men without exception, are equal before God, because they are created in his "image," are his "children," i. e., are spirits in that words' deepest significance.

This has henceforth become the new, practical principle of the Christian world, containing a fullness and depth of blissful consequences, which have scarcely begun to be fathomed. But at the same time, the whole experienced consciousness of a cultivation which develops all ideas was necessary, in order to perceive the omnipresence and intensive power of genius, and to remodel after it the science of the intellect.

We can say the same, and for just the same reason, of the principle of the education which is to satisfy the Christian era of the world.

According to the fundamental law of all intellectual life, that knowledge and theory can only be formed, when the *fact* has been ascertained, with all its power and essentiality, here also the correct method and the complete execution of the same, can first appear when all preparatory attempts have been tested, their unfitness discovered, and urgent practical needs have proved indisputably the necessity of something new.

We believe we have proved, in the foregoing remarks, that this moment has *now* arrived; nevertheless it will surprise no one, if we add that, on this account, the direct practical demands should not be too exorbitant. Also for education, all the consequences of the Christian principle are not yet deduced, nay are scarcely hinted at. And when science does it, it should add the cautious acknowledgement, that this is only an ideal project, which can not be put into execution either immediately, or in all its parts simultaneously. Nevertheless, it is invaluable; for it casts a sure light upon future development and the nearest problems, and, what is most important, it shows what the only correct beginning of all education must be, to enable us to turn safely into the new road. It destroys forever false starting points and mistaken premises. Finally it offers a sure critical measure by which to recognize what was insufficient, false, even preposterous, in the previous practice. And it is also a very important practical point, to devote the latter to destruction, unrelentingly and immediately. "To understand every thing" is not only to "forgive every thing" as was once correctly said, but also to designate clearly the limits of forgiveness and the moment of reform, in order to break the road decisively for the change.

FUNDAMENTAL PRINCIPLES OF EDUCATION.

The first axiom of Christian pedagogy, based upon the principle of the equality of all men before God—and just this is the fundamental truth of the new period—can only consist in this; that equal education, nurture, and care should be furnished to each child, from the first moment of being. The fact that this work is unattainable in its full actual permanence, should not prevent us from seeking its solution, at least approximately, and step by step.

(1.) It includes two things: All education should be popular or geno-

ral, and the first object of this education should be to cherish the body and its health. This is the only thorough beginning of all education, for, as a solid basis, it is indispensable to future culture. It will be shown at the close, what direct practical results of the highest importance follow from this principle.

(2.) Hence, education should begin in the lap of the family and remain in this circle as long as possible. With this assertion, pedagogism reaches back to the ethical-political problem, to found a better family life, to cultivate proper parents, conscientious fathers, wise and dutiful mothers; so that upon these conditions, the results of a better education must be already presupposed, in order to make the commencement of correct education for the future generation possible, otherwise it would never come to this commencement.

The practical circle which here lies before us, meets us in all great problems of historical culture. What is new and what is to be in the future, must nevertheless already exist in order to insure that future for the community. Human history, or more correctly the more than human power ruling in human history, which we fittingly call "providence," breaks this circle energetically by rousing up geniuses in the right places and at the moments of the greatest needs. To the future of what is to be, it sends beforehand more highly gifted individuals who, enthusiastically full of the new idea, hold up a picture of the same, as a problem, to the gaze of the backward race, and are thus the practical prophets of that future. In this way every idea of culture first entered into history; it urges on kindred minds, and these do not rest until they have given it its appropriate realization.

It does not follow from this, (and this fact should be noted), that the idea must appear, in its clearness and ripeness, in him who is first moved by it, for much that is foreign and unsuitable to the fundamental principle may indeed be mixed with it, either through incompleteness, or one sided extravagance. This classification must be left to the future; and we shall also have grounds in the present case for referring to these fair cautions.

(3.) The second axiom, the result of more thorough psychological insight, would read thus; that education and instruction should bring nothing into the pupil from without, because indeed this is impossible if what is won is to become his lasting possession. The right education can only develop gradually the capacities which already exist in him, and that portion of instruction which is to be won by inculcation only, must be referred, as much as possible, to the self-activity of the pupil. On the whole the principle must be asserted; no knowledge except it aims at development by performance.

At a first glance, one would think that the more cultivated pedagogues of the present time must already coincide on this point. When we look more closely, however, we shall see that the necessary clearness in regard to the highest and final consequences of it, has not yet been attained.

Also here, a profound antagonism of principles still divides the previous methods of education from those whose beginnings in the present and whose completion in the future we wish to vindicate. The wide-spread view which we saw strengthened by the theories of Herbart and Boneke holds that education with a certain omnipotence can, through the right application of artificial means, make what it chooses out of the pupil. This illusion rests mainly upon the prejudice that what is true, good, and holy can be imparted to man, can be taught him, and thus become a part of his mind forever, and make a new man of him. Daily experience must convince educators and teachers of the people, that this is not possible. While they seek the cause of their failure in the wrong place, they neglect to attend to right and more effectual means; to the development of those high powers which are originally given to man, but which these teachers wish to furnish him from without.

(4.) Upon the neglect of what is inherent in man depends the fundamental view which, in religious education, and in the most important part of instruction, the religious, has brought its injurious results into the present period, where it still strives to gain ground. It asserts that the "natural" man is corrupted by the "fall," by "original sin," burdened with an original capacity for evil; out of himself, out of this naturalness, no good can come. He must be awakened by "grace," must be born again. But this "grace" can not come to him through or out of himself, but from without, through faith in divine revelations, and through the "way of salvation," described therein.

We surely do not wish to ignore the deep eternal truth which is contained in these expressions, nor to attack it. But it must submit to being freed from its psychologically incorrect form, it will then expand in itself. The abrupt and direct dualism which is arbitrarily erected between the natural and renewed spirit of man, will not escape a psychological revision. It must be led back to the energetic distinction between "temperament" and "character." If the hypothesis of the "fall" (historical or prehistorical) is necessary to explain the presence of "radical evil" in man, that is, as Kant very cautiously expresses it, "the predominant inclination to receive into his will sensuous-selfish motives," it should be left to the decision of psychology, and pedagogy should not be burdened with its very precipitate consequences. The facts alone on which psychology is based will not be changed by it.

The asserted outwardness of the appropriation of faith, and the historical form which is given to revelation, must submit to a thorough correction. They are not only unessential additions which may be carried as harmless ballast, but through the exclusive importance which is attached to them, they mislead one to mistake the real kernel of life in those truths, and lead to errors which have not only injured the religious life of the church, but also the effectual awakening of religion in young minds,—and religious pedagogy, the most important part of the whole.

(5.) This finally brings us to the third, and most important point.

What must be the highest goal and central point of all education and human culture? And here, least of all, can doubt or disagreement exist. "The formation of moral character," is this goal; the ancients called it "wisdom;" the present time calls it, the rule of whatever is good and purely human, "humanity." There has never been any division in opinion, as to what is the nature of moral will, the character of "goodness," the sign of humane intention for what is good, what ought to be, bears in itself its unmistakable, never denied token.

(6.) An essential difference of opinion still exists about the road to this goal and the secondary conditions which insure its attainment, which we can not thoroughly discuss here (this was done in our previously mentioned works), and in regard to which, therefore, it is sufficient to explain which of the two alternatives we choose. These are vital questions of such far reaching importance, that an exhaustive discussion of them would require comprehensive expositions. If one may be allowed to refer to such, then he has the right to give a summary decision, without having to fear the reproach of superficiality or unnecessary arbitrariness.

Some one speak of human, self-conceived morality, either acquired or based upon instinct; of its being entirely independent of religion and pious emotions, and not in the least influenced by the religious emotions of fear or hope; and that it is self-sufficient and in itself its own reward, as it is only the involuntary expression of a noble nature full of humane feeling. We shall not omit to consider the claims of this view.

(7.) If any are not satisfied with such sober morality, planted in mere unconscious impulses, and instinctive emotions, they must remember that this morality, with all its forms and expressions, still continues upon the natural plane, has not risen to the form of conscious "character," alone worthy of man. They are the still dark and sporadically working unenlightened impulses of the originally present (a priori) idea of good, but which, mixed with other impulses as changeable, can offer no picture of conscious, therefore in itself certain, morality. Therefore, because it is wanting in continuance, this form of morality is a very frail dowry for life, and it can not in the least give to man the inner satisfaction which religion yields him. Therefore, they further assert, with very good reason, that the perfected morality which is clearly conscious in its motives, the "ethos" upon the plane of character, can only be won within the pale of religion. For the will first frees itself from all wavering variance and deviation upon the plane of religious morality, because in each moral achievement, even down to the single deed, it seeks to satisfy only the one idea of goodness, (or as Kant more formally expresses it, "duty for duty's sake"). We have thus become one with the eternal will of goodness, and its instrument, at least in intention and conscious sentiment. This conception is here decisive, because it first fully explains the whole fact of conscious morality. That an eternal will of goodness is in God we experience in ourselves, when we are truly moved by that moral enthusiasm which transforms our self-will. For this reason morality has

become religion, not so that it alternates with religion or supplants it, but in this, that it perfects itself in religion by receiving from it the clearest and highest discernment of its own true being and with it, the feeling of sincerest self-certainty.

(8.) True religion or piety in its culmination is nothing more than the continually present consciousness of the true source out of which we draw our moral strength, and through which, alone, every moral consummation is possible. It is continual devotion to God, for it is conscious that it works only out of that highest and holy will; hence it attributes all its single achievements to him, not to itself. This is the deepest and indissoluble oneness of religion and morality. Inversely, this restores its highest value and essential truth to theoretical religion, in regard to what "faith" is, and what it is essential to teach.

On the contrary, a morality without religion is without foundation and superficial, therefore cold and barren; for it lacks its inspiring incentive. A religion without morality would be abstract and dead, a mere thing of perception, or better, an outwardly received faith, remaining a stranger to our innermost being. Both lack that enthusiasm which penetrates and sanctifies.

(9.) The foregoing hints, while they can not scientifically exhaust the matter, are still fully sufficient to conduct us, to the highest and concluding axiom, in regard to the educational question.

To rouse true piety in us, in the sense designated above, to make religious opinion the constant supporter and companion of our life and deeds, must constitute the highest aim of education, the goal of all its special achievements; for the formation of moral character, in an enduring and clearly conscious manner, is only to be attained by true piety.

Hence, the religious sentiment in the pupil should not be nourished incidentally and sporadically, but every thing in perception, emotion and will should awaken this sentiment, confirm it and help to found it in the right way. But this is only possible when religion wins a universally *human* form, when it harmonizes with and is confirmed by all the most reliable researches of science, and by the noblest fruits which art and human culture are able to offer.

(10.) The greatest injury however—and this pedagogical mistake ought, first of all, to be removed—is when the young deeply sensitive mind is expected to receive doctrines of faith which are unintelligible, indeed wholly unapproachable by it, and which afterward—this is the unavoidable result—must be denied by his maturer judgment, and reckoned the trumpery of an obsolete religious culture. Thus, in the most important questions in regard to which man needs clear conviction from the beginning of his cultivation, doubt and discord are sown, where peace and the strongest confidence should be implanted. It is scarcely to be surveyed in detail how much has been misad or overrated by wiser religious teachers, in the well-meant, but short-sighted fear of deviating from old traditions. But that the results are most un-

profitable, is shown by the inefficiency for after life of the religious culture thus received. And indifference, dull listlessness are not the worst results of such a mistaken, wholly unpedagogical treatment of the most important subject. In stronger, more resolute spirits, disinclination and disgust are the natural results!

We acknowledge, that it is one of the most difficult problems in the religious reform of our time—and no sensible person will deny the need of such a reform—to form something new and eternally valuable out of what is old and superfluous, gradually, and in such a way, that no offense shall be given to pious spirits, while what is superfluous shall be less and less valued. Perhaps it will be the best practical means of leading the older part of the community to a freer, sincerer and clearer view of Christianity, when they see the wholesome workings of the same upon their children. Numerous attempts at an improved religious instruction have been made in Germany. None have been found reliable, and thus the subject has remained an open question. But it must be solved, because of its urgent importance. A thorough, enduring reform can also here first come from above; the future preacher should be allowed a free philosophical theological culture, he should be released from all dogmatical compulsion, and freedom should be afforded him to proclaim unhindered his religious conviction as his own—as we have seen philosophers and naturalists, who have done this, have particular effect upon believers also, because their word, bursting forth out of their independent convictions, just as convincingly worked—and from this renewed and deepened religious life at the head of the parish, a better and more effective introduction into the Christian faith may be expected also for the growing believers.

It is desired that the old faith of our ancestors may be restored to us. We share in this wish with our most fervent convictions; we also are not willing to miss any of the power and blessings of this faith. But it can no longer be forced upon us with the old means; no road leads backward. The new period must, in accordance with its collective culture, reconstruct it out of the eternally flowing spring of religion; this new form does not therefore reject what is historical in it, but wins it again in a full historical sense. And this is not merely an indefinite wish, a vain effort; the process of this "discernment of faith" has already begun. One must resign himself to it, only gazing forward and trusting to the indestructible power of religion.

V. THE IDEA OF NATIONAL EDUCATION ACCORDING TO THIS PRINCIPLE.

From this outline of universal principles, and the highest goal of all education, we may claim the right to decide the practical question also; where, in the present, is the only correct starting point given, from which to remodel education and instruction in accordance with the higher demands of our time?

We can expect before hand, and our fatherland may be exceedingly

proud of it, that this most important, not only national, but universally human question will first be solved in Germany, where it was first proposed. Just as the church reformation could only proceed out of the religious depths of the German spirit, so the two most important problems of the present: a new reform of the church, growing out of a continuously developed theology, and a national education which is also destined to be the elementary culture of the whole race can only be expected from the energy and depth of the German mind. Both problems, however, the ecclesiastical as well as the pedagogical, are more interiorly connected than may seem at a glance. We have learned that all education finds in the cultivation of religious sentiment its final goal and firmest support. A more effectual and thorough religious education will be satisfied only with a spiritually renewed church, and inversely, religious education can go hand in hand only with a settled religious reform. For the best understanding must exist between the liberal pedagogue and the church believer, if it is to go well with the religious culture of the parish. We will leave it to unprejudiced observers to judge if this harmony already exists. In both respects we are referred to the future, but to a future whose commencements are already given.

Pestalozzi—Intuitional Method.

As regards the pedagogical part, we have already proclaimed at the beginning of our article, and we believe we have thus asserted nothing new or objectionable, that we recognize that memorable starting point in Johann Heinrich Pestalozzi, because he has discovered the only correct foundation for the elementary education of the child. It may be still less known in all circles, what in his intended educational and instructional reform is eternally true and should be consistently developed. We consider it not yet superfluous to return to Pestalozzi's fundamental thought, in order to judge of its scope, and where something else, partly supplementary, and partly corrective, can be added.

What we hold to be the really memorable deed of Pestalozzi, what through him is forever won for human culture—is the simple truth, that a systematic development of the child's earliest consciousness must precede all real instruction—an achievement full of infinite blessings, not only in its direct pedagogical operations, but also in the incidental, subordinate result, that it has opened the way for a physical care and hygiene of childhood, more in harmony with nature. And just here, Friedrich Fröbel, his highly deserving follower, inaugurated his plan of reform. He has decidedly promoted that educational art of childhood, and if we do not err, completed it. But there remains an unlimited amount of work to be done for the realization and propagation of this educational idea. There have been but few beginnings made and these are really sporadic and incidental, the varied, highly important work is not yet, as a whole and in the intrinsic parts, a national question. It must be raised up out of the sphere of mere personal and private efforts, it

must be given to the legal organs of state government, to be put into execution. In what way, and within what limits, we shall here show.

Pestalozzi has confessed, with a touching conscientiousness, that numerous partially unsuccessful attempts were necessary, before he could see clearly into the fundamental thought of his educational reform. As it was merely a starting point which he won, and indeed only one of the starting points, as will be shown; as further he and his followers held the one for the whole: so it will be understood, how it could be spun out to such a superfluous and helpless breadth, that there was danger that the principle might be forgotten or overlooked. Pestalozzi designated the old style of instruction as the "monkish-gothic" educational indolence, congealed in superstitiously honored formulas. We may have shaken off the "monkish-gothic," but not the countless remnants of superfluous trumpery, which every new educational method carries with it, as lifeless drags, and from which its representatives, through indolence or habit, expect the real success.

Every educational method is in danger of this ossification, this diffusion into an unnecessary breadth, if it prematurely mistakes its details for generalities, the mere beginning for the end, the part for the whole. In this case what is unessential, changeable and indifferent will be overrated, and an illusory value attached to it, which gives the opponents an unfailing opportunity to declare the whole principle to be false and worthless. We must remark already that Fröbel's theory appears to have arrived at the same dangerous point which, in the beginning, threatened the method of his predecessor, Pestalozzi, and a chief design of the following discussions is to free it from this danger.

Pestalozzi speaks with decisive clearness, in one of his later works, of the principle of his educational and instructional method, at the same time indirectly designating its limits.

"When I look back and ask myself what have I accomplished for the progress of the human race, I find I have placed the first principle of instruction in the recognition of intuition, as the absolute basis of all knowledge, and by the rejection of all single theories, sought to discover the essence of the theory (of learning and teaching) and the primal form, through which nature itself must determine the culture of our race." By "nature," Pestalozzi means here, as the sense of the whole requires, not the outwardly objective, but the interior nature of man, his original capacities. These and only these should be roused to self-consciousness, in order to discover the "primal form" of their culture.

He expresses very clearly what he means by the cultivation of the "theory of intuition," by the "art of intuition." The "intuition," from which all knowledge must proceed, to which it must be referred, or through which it must be controlled, does not consist of passive acquiescence, but of self-active reception. From the tenderest age, the child must be practiced in attentive observation, in discerning between what is accidental and essential, and must be guarded against all merely play-

ful inspection. At the same time, the pedagogical intuition, by means of certain psychologically arranged exercises, must become the "art of intuition" which afterwards draws into its circle, moral, æsthetic and intellectual intuitions.

Out of the "intuition" of the thing, won in this way, its "name" arises. (The child should hear no name which must remain for him empty word-sounds, which he can neither see nor understand; a highly important unexceptional form of all instruction, which we still utter, as a warning, for all teachers of morality and religion.) After naming it, we should proceed to designate its qualities; the definition, the distinct "conception" of the thing, is developed from its clear description. "Definitions without intuitions create a baseless, fungous wisdom which quickly dies under a cloudless sky, sunlight being the poison of its existence." How true is this last remark of the immature and unfinished wisdom which is furnished to the child!

It is well known that Pestalozzi first developed this art of intuition from the simplest geometrical forms, from numbers and speech; hence numbers, form and speech are the elementary objects of an analytical dissection which he has most extensively cultivated. Unfortunately for his method, it was long ago condemned, and not on its own account is it mentioned here, but only to warn against a similar fault in the present case. A method, fundamentally inspiring and influential, can, by pausing too long at the beginning, work itself into an empty, burdensome formality which detains the pupil wearisomely upon the lowest plane. That which can and should enliven, has then just the opposite result, it becomes a deadening mechanism. Also what is unessential and incidental is easily stamped as essential and characteristic. Finally, unintellectual mediocrity takes hold of it, makes these unessentials the peculiar domain of its efforts, and caricatures a noble thing.

What Pestalozzi, in the depth and originality of his conviction meant, and what has become the kindling spark, indeed still more what it can become, now and for all time, is the thought that only that can become the true and intellectual property of the child and also the man, which he has raised to transparent intuition *i. e.*, thought through and through, and in free perceptive activity, brought forth out of himself. It is then for the first time one with his consciousness, his conviction, which he can command theoretically and practically every moment of his life.

And it was this also which J. G. Fichte has greeted as the memorable deed of Pestalozzi, constituting an epoch, as the only means of healing an age sunken in dead traditions. A national education, based upon this principle, and continued energetically through several generations, must awaken a new popular spirit; even more, must place man in this latter period of his existence, "for the first time, upon his own feet." Verily, the often lamented, idealistic, extravagant boldness of this assertion, does not consist in this, that the thought is in itself false, or controvertible—it is rather perfectly evident—but essentially because

its execution is not impossible, but subject to very mediate, preliminary conditions; hence that, in its intelligible operations, it can become visible only gradually and late. Fichte wanted immediate results; he wished the instant rise of a new generation through that means; and in that he erred, or rather—in order to expose the essence of his reasonings—he wanted to fulfill a clearly recognized duty, to place that goal before all eyes, unconcerned, or leaving it undecided whether that goal could be reached through his suggestions or not.

And yet neither Pestalozzi nor Fichte have spoken in vain. They flung the ferment into futurity; the claims of a national education are universally admitted, and its commencement established; but its accomplishments must be continually sifted and improved, by constant reference to the principles on which it rests.

VI. WHAT THE PRESENT HAS ACCOMPLISHED THROUGH PESTALOZZI, STILL MORE THROUGH FR. FRÖBEL.

But this principle itself first needs to be supplemented and underlaid by a deeper lying, two-fold element. We must here consider two things, namely:—

First, The earliest spiritual life of man, of the child, does not by any means consist chiefly in the appropriation and independent working up of the "intuitions," but intuition is preceded by sensations, involuntarily accompanied by "feelings" of comfort and discomfort, of acceptableness and offensiveness, whose collective contents must first be sifted, and separated into distinct groups, out of the obtrusive confusion with which they burden awakening consciousness.

The child lies in a dull chaos of such sensations and feelings, which ceaselessly change and urge him on with them. How does he ever raise up out of this confusion any thing single and certain; still more, how does he himself rise out of that flood, and "give birth to himself as I," as Fichte designates it, and in which he correctly finds the first germ of all that is specifically human?

Surely this "growing I," this self-birth of I, can still less be given him from without, poured into him, than any thing else which he is himself to become. His own inner power must raise him to it. But the birth can be lightened, forwarded, the whole beginnings of consciousness contained in it gain an advantage in clearness and energy, which will place the pupil, thus cultivated, a grade higher in his general spiritual ability.

This first transition of man to "I," to a more conscious, energetic,

* In a pamphlet hitherto little esteemed, written in 1807 for a particular occasion, "The Patriots," two conversations issued before the Address to the German nation, he makes the following retort, in answer to the inquiry "whether he really hoped to persuade those who stand in the high places of the nation so much as to grasp the idea of a national system of education, not to mention the resolution to incur the necessary expense of such a system?"

"As I have already stated, I do not care to make up my mind as to what is or is not to be hoped; and among all the obscurities which may exist in my knowledge, this is the only one which I am well content to endure, and which I do not wish to have cleared up."

finally inseparable self-comprehension, in opposition to all outwardness (all not I); this absolutely epoch-making transition (for human existence), must not be left to chance or the unsystematized operations of the child's first surroundings, but education must strive to guide him by psychological art, if he is to become conscious of his correct beginning.

This is done, in the first place, by clearing up the earliest consciousness as to its elementary sensations, according to a firm rule and a gradation in which the consciousness itself develops. The child must first be made capable of deciding whether he is hungry or sleepy, whether he tastes or smells, etc. Out of this the discrimination between the various sensuous regions must develop; and the elementary sensations within the same, the fundamental colors, simplest figures and proportions of sound, fundamental tastes, and whatever else in this region of sensation and feeling is found capable of culture, must be brought to plainly discerning consciousness; and what is inseparable from it, be designated by fixed signs. Here is the true beginning of the "theory of words," and not, as Pestalozzi thinks, in the naming of already finished objects, burdened with complicated qualities, in order, as he says, "to make the pupil acquainted as early as possible with the whole compass of the word and names of familiar things." This, on the contrary, plunges the pupil immediately into the misty world of opaque, unintelligible and thence, for him, empty ideas, and imparts to him the first sample of all later superficiality of discernment; he is satisfied now, as well as later, with transmitted words, instead of really recognized objects. All that the pupil upon this plane can really understand and consequently designate, is the world of sensations and feelings which he has lived; it is also for him, that which is first evident and irrevocable, in which he can first experience the highly important, even through dim consciousness of conviction, according to the decisive canon of all education and all human culture, that, only that has become our conviction, which we have inwardly experienced and thus embodied in our consciousness.

This then, is the first foundation which should be laid under Pestalozzi's theory. The "A. B. C. of intuition" which he gave in his "Book for Mothers," should be preceded by an "A. B. C. of sensations and feelings," which should be the very first book for mothers. It will be shown what has been done toward such an one. But we must remark that in just these beginnings of education which are to be left to the mother, or family surroundings, the execution will always remain most defective and insufficient. What mother is in the position, even though she were intellectually sufficiently cultivated, to devote herself to the youngest child, aside from the others, so as to make its sensations and feelings clear to it, and to keep its first attempts at speech in continual and exact relation to these sensations and feelings!

And this is the perfectly coinciding objection which can be made to the introduction of such exercises, particularly when they strive after a certain systematic thoroughness, as indeed has already been attempted.

Hence, though we hold fast to the general thought, we must nevertheless still declare such systematic breadth theoretically superfluous, practically even wearying and weakening; for it is not necessary, for the pedagogical aim, to experiment with the child through the whole system of human senses and sensuous feelings, but rather to waken it to a consciousness of what is nearest and most obtrusive, and within this compass at least, accustom it to give close attention.

Notwithstanding this, or perhaps on this account, it is necessary for a complete system of pedagogics to designate this problem, at least in its general outlines, and to call attention to its fundamental significance for the life of childhood, leaving to a detailed practice to use what it can of it. We will show later what Fröbel has done in this direction. But the nature of man is by no means merely theoretical, least of all the nature of the child. The impulse of self activity is just as originally awake in him; and, as in his later life, his actions and knowledge must continually harmonize, so also must that inherent impulse of activity be early developed in the child, led into regulated paths, and also be made the earliest element of his cultivation. By these means, the real central point of the intellect, the inner unit of its inseparable theoretical and practical forces is first touched; for in reality, there can be no knowledge which, through its involuntarily accompanying feeling, does not call forth a fixed practical conduct, just as, inversely, each practical fulfillment must be guided by theoretical activity (thus involuntarily awakening attention and judgment) upon the development of knowledge.

First, and this is the second, still more important supplement which Fröbel—for he must be referred to again here—has added to Pestalozzi's method. He has gone back to the original impulse of activity in the child ("impulse of play"), and has made a fruitful ground of varied preparatory cultivation out of this previously neglected, barren or rankly-growing spiritual element. This is what is new and memorable in his pedagogical accomplishment. But we are first able to appreciate this, when we understand the fundamental thought of his system.

We also believe, we should not consider ourselves obliged to follow all of Fröbel's propositions, directions, and precepts. To us, these seem often to be lost in trifles and peculiarities, even in extravagances or absurdities. And these externals which have been seized and cherished by his common followers, have obscured the great importance of his pedagogical principles, or at least have prevented their universal recognition. Instead of such externals, we must obtain possession of the deeper lying, fundamental thought which is capable of most varied and heterogeneous cultivation, and adapt the practical application of the same to the given circumstances.

Fröbel is the psychologist of the life of childhood. With rare individuality and instinctive comprehension, he has thought himself back into the beginnings of the child, and, permeated by the deeply religious and humane belief that primitive human nature can contain nothing false

or delusive, seeks only to develop its inherent capacity, gradually, and in every direction. This is the collective work of earliest education.

Therefore, this education, at first, must offer nothing new to the child, plant in him nothing alien; neither can it do it, it can only call forth what was already concealed and present in him. For the young, growing, human being will yet wish, even though unconsciously, for what is best in itself and for him, and moreover, in the appropriate form which he feels he has the capacity, power and means to produce as can be explained by analogous examples of animal life. Hence, every active, prescribing, determining and encroaching theory, instruction or education, must necessarily operate destructively upon the normal human being.

This fundamental thought which Fröbel continually enjoins in all its variations, leads to a deeper one which has also not escaped his notice. He expresses this only axiomatically indeed, in the following form.

"In every thing there rules and operates an "eternal law," which is always expressed with equal clearness, outwardly in nature, inwardly in the spirit, and in life, which is the union of the two. An omnipotent unit underlies this omnipotent law—God. The Godlikeness reposes, operates and rules in all things. And all things exist only through the Godlikeness which operates in them, and the Godlikeness operating in every thing is the essence of this thing.

"Therefore the destination and the vocation of every thing, is to develop and represent its essence, its Godlikeness, to manifest and reveal God, through outwardness and transitoriness.

"The particular destination, the particular vocation of every perceiving and reasonable human being is to become himself, fully conscious of his essence, his Godlikeness, to win a vigorous and clear insight into it, so as to practice it, self determinedly and freely in his own life, and to make it effectual in all the directions which are prefigured in his inner capacity.

"The awakening (the treatment of man as a being of growing consciousness) to the inviolate representation of the inner law, of the Godlikeness, with consciousness and self determination, and the supplying of the means for it, is the education of man."

"The aim of education is the representation of a dutiful, pure, inviolate and therefore holy life; the Godlikeness in man, his essence, is to be developed and raised to consciousness by education, and thus he is to attain self knowledge, peace with the world, and union with God."

Thus, for him, the whole human culture culminates in religion. It is for him at the same time the starting point, centre and goal of all true, successful education. But this religious education urges immediately to industry. "As early culture is highly important for religion, so is it just as important for genuine industry. Early labor, its inner significance judiciously directed, enhances and confirms religion. Religion without industry is in danger of becoming empty dreaminess; just as labor without religion makes of man a beast of burden and a machine. But

religion and labor should not only operate outwardly, they should also react upon the interior man. Thus abstinence, temperance and economy will be produced. Where religion, diligence and sobriety work in union, there is an earthly heaven, there is peace, joy, grace and blessing."

The fundamental condition of all this, however, is, that each shall really find in life his appropriate vocation, the destination which his being demands, or at least, that education shall prepare him for it, and thoroughly capacitate him for the fulfillment of such vocation.

But the practical application of these pedagogical principles shows immediately a highly important result. Where education really permits an unhindered, inviolate development of the original capacities, there the inherent diversity among individuals becomes instantly visible, in consequence of which, each child, even though only in the germ, is distinguishable from other children. It follows from this, that the correct, conscientious education must never generalize, but instead, must be calculated for the individual capacity.

But this result is not less important for the psychological view of man, than for pedagogism. It is the actual proof won by careful pedagogical observations: first, that each otherwise healthy and normal human being, a fixed variety of spiritual capacities and impulses unite in the unit of essence, through which it is distinguished from all the rest of its kind; secondly, that these capacities and their peculiar union do not, through education or artificial culture, enter into him from without, but that they are present in him, as an original dowry, before his consciousness develops, and are the conditions of the development of that consciousness, are what may be called the "Godlikeness" speaking after Fröbel's manner, and according to our own definition, the "genius" or individuality of each mind.

Branching off a moment into philosophical definitions, we express it in other words: Fröbel found, through pedagogical insight and personal experience, the same thesis which the psychological study of man shows, as its highest and deepest result. It is what we have called the "universal prevalence of genius" in the human race.

That nevertheless this only scientifically recognized truth, if it should become universal conviction, if it should enter into life with all its practical consequences, would cause a complete transformation of our civil and social affairs, would open to us a kingdom of freedom "by the grace of God,"—this assertion will not seem extravagant, when we have learned what the root of all the misery, discontent and moral corruption of the human race really is; the stinting, the restriction, even the attempted extermination, of its original capacities.

We must leave this path of ever increasing depravity; and in this simple demand, all the various social problems of the present can be summed up. And it also includes the solution of the religious problem, that the spirit of Christianity, become for the first time, a complete truth.

Neither is it necessary to show how immeasurably important education is for this process of the restoration of humanity. The first obligatory condition of return lies in it, and it is able to prove through its successful accomplishment, that such a return is possible. What man in his "obscure strivings" is capable of becoming, he perhaps will finally become upon earth we do not yet know it, because the correct all-awakening education could never yet reach him, or only rarely and exceptionally, and even then imperfectly—an education which no single arrangement will ever be able to vouchsafe, which can be completely successful only in a highly cultivated commonwealth. Therefore, it is the next, most urgent and most indispensable problem of this commonwealth, this state, to pledge every thing for a thorough reform of the educational system. The states of the present period, at least those of German lineage, generally recognize this duty, but are on the whole very far from applying the right means for its fulfillment. They seldom advance beyond an experimental, blind groping, whose unavoidable results are mistakes, even retrogressions, and the spoiling of otherwise healthy beginnings. In the foregoing we referred to examples of this kind, which are based upon a thorough misunderstanding of the real needs and the appropriate means.

VII. THE EDUCATION OF CHILDHOOD ACCORDING TO FRÖBEL.

In the foregoing, the highest criterion was found by which to judge, not only of the value of education, but also of the only correct educational method. According to these premises, we can scarcely be accused of over-valuation, if we find in Fröbel's theory, the only correct starting point for the national education of the present time. Not however, the peculiarity of the propositions and arrangements on which Fröbel first stamped his principle, but his principle in itself, has that value for us; for it possesses a fruitfulness and power of development, which might be made effectual in directions as yet untried. We shall show still more definitely what we mean to say by this.

First, we must recognize Fröbel as that educator of the newer time, who has succeeded, with full consciousness and clearness as to the consequences contained therein, in paving the way for a system of education which completely corresponds to the maturer insight of modern psychology, indeed alone forms its pedagogical supplement. As we have also proved—no matter if this is every where effectively recognized, or not—that the real and eternal, fundamental truth of christianity lies in that higher, merely humane recognition of the being of man; so this educational theory then, is the only one which corresponds to the true spirit of christianity, and consequently will be equal, wholly and completely, to the demands of the Christian era of the future, even though this future may not yet be fully understood, in that spirit, either by the educators or by our present civil rulers.

Fröbel's essential and exclusive service is in having perceived more

deeply the nature and needs of the child, on its first plane of life, than any one before him, and in having found the means to meet these needs.

The means which he devised, are manifold and ingenious; but they are not artificial; they are drawn out of the child's own nature. They can all be reduced to the highest law of all education. Frobel called it "the law of the mediation of opposites," thus recalling too generally and too strongly, the formulas of the then ruling philosophy. Perhaps it would more clearly designate Frobel's achievements to call it the law of the continuous, even development of the child's consciousness out of its own activities. Madame Marenholtz, who has a deep understanding of Frobel's idea concentrates this thought very happily in the three phrases, "freedom of development, labor of development, and connection of development."

Accordingly, Frobel demands that bodily and spiritual development shall be united from the first, and that this development shall begin with the beginning of childhood. He thus continues and completes what Jean Paul in his *Levana* began by single hints. He has thus founded an educational system for the infant and supplied a deficiency which Pestalozzi left untouched. The entire nature of the child upon this plane, consists in being the appropriating eye. Hence he must receive the first, simplest, sensations as powerfully and as completely as possible, and never in a confusing mass. He must be early accustomed to a certain order and consistency, that he may dimly feel that he is subject to a higher, beneficent power. In this way the germ of the desire of ruling, the principle of "selfishness," which exists in every child, for the protection of its helplessness, will be led from the start in the right direction and grow into a habit of subordination and grateful obedience. "It is highly important for the present and future life of the human being, that it should imbibe upon this plane, nothing sickly, low, coarse, nothing doubtful or bad. Therefore, the glance, the expression of the persons surrounding it, should be pure, and calculated to awaken and cherish confidence; all surroundings of air, light, space, should be pure."

The first feeling in common which unites the child with its mother and brothers and sisters, is the earliest germ of genuine religion. Dimly anticipating, the child gains thus, and also through the habit of wholesome obedience, the feeling of being supported by an all-embracing, saving, beneficent power; and thus the healthy germ is planted in his mind, which will bring him nearer and in the only right manner, to the idea of God. If father and mother wish to furnish their children with this never-wavering, never-vanishing hold, as the highest dowry for life, then parents and children must always appear united, if they feel and recognize themselves in union with their God and Father, whether in their silent chamber, or under the blue heavens. No one need say that the children do not understand it; they understand it, not in the definition, but in their interior being. The religiousness, (sincere union with God), in all circumstances and situations of life, which does not grow up with the

human being from childhood, will later, seldom rise to a full, strong vital force; as also, a germinated and cherished religious sentiment will win the victory against all the storms and dangers of life."

These are Frobel's essential educational principles for the first epoch of the child's life, but in regard to which, it must be mentioned, that he has unavoidably presupposed much which belongs first to the following stage of consciousness. This is also true of what he says about the earliest cultivation of the religious feeling. We admit however, indeed we repeat emphatically, that he has in general, designated the only correct starting point for the development of the child's religious consciousness. It would be well to consider the reform of the religious instruction from this point also.

If it is considered necessary to hang balls in the cradle for the earliest cultivation of the child's intuitive capacities, that it may gradually be impressed by the most perfect geometrical figure, the sphere; further, if these balls, of the box with six balls, according to the "first play-gift," are to show alternately the three primitive, and the three mixed colors, arranged in prismatic order, and to teach him, as is hoped, "the discrimination of colors, and the law of opposites, when between two primitive colors the mediation is placed;" these, like many other things which a playful system has further devised, are things of disputable value, whose application must be treated as an open question. Opponents, as well as disciples must be careful not to seek in such things the real spirit of the method, and the typical sign in which its being is clearest and most evident. It is high time in our judgment we went beyond this.

Fortunately, we do not stand alone in our view of the subject. One of the most judicious advocates of Frobel's theory, Bertha von Marenholtz-Bülow, whom we can designate as the best living representative of his educational work, insists in her lectures and writings, that we must grasp the fundamental thought of his method, selecting freely out of what he has proposed for the execution of the details. This excellent lady, filled with the noblest enthusiasm for the cause, has to wage a double battle: First, with the prejudices which rise up from without against the principle, and Second, with the members of her own party, who make the broad spinning out of details their chief object, and thus react upon the spirit of the method, paralyzing it, and causing it to be misunderstood. With reference to this point, she expresses herself thus; "Frobel's mind selected and arranged the matter, the forms, colors, and tones, in the elementary simplicity in which they can penetrate the child's soul, without disturbing the stillness of its budding life, without awakening it violently or artificially out of its slumber, and without stifling the glimmering spiritual spark in the ashes of materialism. He found the rule under whose guidance the motherly instinct can proceed safely and freely, in order to find the right."

With the appearance of language, the nursing period ceases and that of childhood begins. This is the child's essential playtime; and here we

meet one of Fröbel's happiest and peculiar inventions. He has organized play and developed it to a complete system of practice of the child's power and self-activity; every where making use of the impulses and instincts of the child, and what is not less significant and worthy of recommendation, keeping the child as much as possible in intercourse with visible nature, and teaching it to observe nature's regular transactions.

Hence Fröbel says correctly, in this sense; "Play is the purest intellectual production of the human being, in this stage and also the model and copy of the entire human life, of the inner, secret, natural life of man. It gives birth therefore, to peace, freedom, satisfaction and quiet peace with the world, inwardly and outwardly, the sources of all good repose in the child, and proceed out of him. A child who plays capably, with quiet self-activity, and perseveringly until overcome by physical weariness, will become (if later education does not destroy the foundation thus laid), a capable quietly persevering man who self-sacrificingly promotes his own and others' good. The plays of this age are the heart-leaves of the whole future life, for the whole man is visible in them, in his finest capacities, in his innermost being." We think this is excellently said; in the instinct for a certain kind of play and sphere of play, the child's inherent capacities and intellectual tendency, upon the correct knowledge of which the succeeding education has to build, betray themselves earliest, most involuntarily and therefore, most reliably.

We do not think it necessary to go into the details of this system of plays. In this field, Fröbel has elaborated with skillful and exhaustive perseverance, all forms of play, in order not to disregard any part of the child's capacity and need of cultivation. That the symbolical-didactic meaning of these plays may not be overlooked, he has furnished each with a commentary of short verses accompanied by a song.

He must have intended to work more upon the parents and educators with this didactic accompaniment, than upon the children. For we think he mistakes entirely the nature of the child, when he declares it capable, while playing, or through the play, of becoming conscious, even with only half a reflection, of its particular design or its higher significance. It is absorbed, as it should be, in the interest of the pure activity of play; therefore, only those kinds of play can be recommended which develop without any secondary meaning or reflection, the physical or intellectual capacity, as the "play of motion," little gymnastic exercises, "the building plays," "the braiding plays" that practice them in forming and inventing, and the highly important and emphatically to be recommended "garden plays," in which the children are led to cultivate the beds of their common garden, one of which each child should own and care for. Flowers, fruits and vegetables are raised here, and these serve, by watching and examining, to make the still course of nature's laws clear to the child's apprehension in actual results, "if he can not go out into the fields or woods, in order to watch nature there in her workshop, to learn to sing from the birds and to observe the insects."

"The child should grow up under the influences of nature. There it

should gradually learn that laws underlie all organic formation; should, through the loving care of animals and plants, prepare itself for the loving care of human beings, should, in imitating the works, find and love the great Master as the Creator of nature, and its own Creator, should breathe in the peace which rules in nature and in the occupations with it, before the noise of the world and sin enter its breast."

These are indeed, eternally true principles of education and capable of endless application; the Kindergarten has only to strive more and more after their realization, to be certain of its blessing. But it must avoid what is superfluous and small, or where this has already crept in, throw it overboard as injurious ballast, so as not to compromise and injure the idea. And if Fröbel's example should only prevent the crowding of the children into small, close city buildings, and send the infant and other schools out into gardens, or garden surroundings, he would have accomplished a very important work. Also the crowding together of children is one of the most prominent evils, because it prevents all pedagogical individualization and paralyzes educational activity. Fröbel wished to limit the number of children in one Kindergarten, to thirty or forty, so that one teacher could completely oversee and lead them. All these evils and hindrances to success can only very gradually be removed. But it is our next duty to pave the way for their introduction and diffusion by a growing understanding of the subject.

These important aims and their consequent, but slowly spreading results, however, can for this very reason, no longer be left to the single or temporary activity of benevolent, private persons and private societies. A durable, all-embracing systematically-progressive organization should be secured to them, and this can be accomplished only by the state and the communities. But Fröbel's educational precepts must henceforth become the altogether controlling principles of state pedagogy; and the Kindergartens in which a part of these ideas has been carried out, must, as we shall also demand for the Krippen (*crèches*), be introduced into the system of the educational institutions of the state and the commune.

The suitable point of connection already exists. The need of so called 'child-saving institutions' for children from three to six years of age, is universally acknowledged, and in the richer communities of our cities and villages is supplied as far as the means allow. To raise these 'saving institutions' already existing, or yet to be erected, to those higher organized "play-schools," should be the next step, and is not too difficult, if we can find suitable teachers.

This however, calls for the solution of another question of our time, which also belongs to the most urgent; to open new spheres of calling and branches of labor for the female sex. We will speak again of this part of the pedagogical question.

The fear, that all these reforms will heap financial sacrifices upon the state and community, which, with the present taxes, are scarcely able to secure a scanty income, to the already existing teachers—this continually repeated consideration must not be a reason for detracting

from the well founded right of such demands. It is, on the contrary, one reason more why this many sided provisional condition in which we live, in civil intercourse and in social arrangements, can have no duration, and should be shortened by all lawful means. It would be extremely inconsistent to wish to postpone the necessary reforms to a better future, with the oft repeated excuse that they are impossible or even presumptive, or revolutionary. What is proved to be necessary is never revolutionary, but rather truly conservative. And that can not be pronounced impossible, whose first preparatory grades already exist, and are easily recognizable. Nothing more is necessary, than a correct beginning and persevering progress upon the chosen road. It is variously shown, also by this opportunity, that the only right commencement for the improvement of the people's condition, is in educational reform.

VIII. THE KRIPPEN-DAY NURSERY.

Frobel left a gap in the starting point of his educational theory, which the present trial has fortunately filled. And the means is planned so entirely in his spirit, that it can be consistently inserted into the system of educational institutions projected by him.

The earliest period of childhood, as its own nature and general custom require, should be passed in the family circle. Here, the mother is every thing at once; she nurses it, rears it and waits on it, and what is most important for the child and what repays her best, she cherishes the soul of her child. But how few among the mothers of the working classes in the country and in cities, are in a position to fulfill this vocation even approximately! And those who could do it (outwardly), do it only imperfectly, either diverted by other cares or interests, or they lack the intellectual ability, whilst a mass of ineradicable prejudices and false habits rule them, and thus often make a very doubtful nurse out of a mother whose duty it is to bestow the best care upon her children. Hence a normal school for mothers, which is not theoretical but practical, which shall teach by example, is an important, almost indispensable element in the system of popular education.

Accordingly, here, as in the higher grades of instruction and education, the universal family, the community, should furnish the assisting supplement, by erecting an asylum in which mothers can leave their nurslings under a conscientious, rational oversight, without however withdrawing their care from them entirely, or becoming in the least alienated from them. For it should be the rule, that children should be received only through the daytime, and taken home again by their mothers in the evening. The double significance of this arrangement is not to be mistaken; the tenderest age of the child is cared for sufficiently without loosening the family ties, and the mothers witness a model of rational childish training, whose value is established by experience. They learn, and are themselves indirectly educated by it.

This aim, the public protecting institutions for children, called "Krippen" (crèches), in memory of Christ's manger and the latest creation of

pedagogical benevolence seek to fill. In their limited peculiarity, they received their perfection first in Paris, while we must mention, that protecting institutions for children, from their third year, were introduced into Germany and in England, much earlier. It was the humane Princess Pauline of Lippe Detmold, who erected the first children's protecting institution which soon spread over all Germany, and latterly, was particularly fostered by the "inner mission." In England, it was the great socialist Robert Owen, who incited by a plain man of his village, J. Buchanan, first founded a children's protecting institution and school. The example worked more slowly there than in Germany, because its first appearance seemed united with ideas of socialism, whose impracticability could not be ignored. The clergy, particularly, opposed obstinately and effectually all these efforts. So it happened, if we are not mistaken, that this important member of a system of popular education, has not been energetically developed, that it is still left sporadically and accidentally to the care of benevolent individuals and associations.

In France, in Paris, as we have already mentioned, the system of protecting institutions for children, has been completed and perfected, by this important, even indispensable member. Marbeau, member of a committee for children's protecting institutions in Paris, first grasped the idea of such an institute, in order to displace by it, the institutions for nurslings, which, as the enterprises of private speculation, beyond the reach of public control, operated injuriously, rather than usefully. He proposed to remove these evils by forming public societies; his plan was supported, and thus under the protection of the Duchess Helene of Orleans, the first "Krippe" was erected in Paris, 14th November, 1844. From Paris, this institution spread over France, Belgium (where in Brussels a model Krippe exists), Germany (Vienna, Dresden, Munich, Stuttgart since 1868), England (London, Manchester), etc. A model Krippe in the exhibition at Paris, 1867, excited the attention of thousands of visitors, and was the cause, as our informant says, of banishing many false judgments and many an apparently well founded doubt.

The arrangement of the Krippe is essentially the following. Every week-day, the mother brings her child to the institution in the early morning hours and goes after it again in the evening. She either pays, nothing for it, or a small contribution—in Paris from six to twelve sous, in London three pence, in Vienna, three kreuzers per day; the child is taken care of, fed, bathed, busied with the first classified attempts at play (preparations for the "Kindergarten") and generally dressed. Every institution is under the constant care of a regular physician, and the further control of a voluntary committee of ladies. On Sundays and holidays, the institutions are closed, because there is no urgent need of them, and also, so as not to wean the children from family life.

The results which, according to the report of the committee, through Mons. de Malarce, the Krippen show as the fruit of their long existence, are favorably portrayed and seem very credible; for they correspond to what was expected of them. Weakly, neglected, sickly children have

recovered rapidly; also their morals were thoroughly improved. Irritability, self-will, restlessness, which had made them burdensome to their parents, particularly to the father, disappeared gradually, under uniform, quiet, patient treatment. They grow daily better behaved, and thus dearer to their parents; an important promoter of family discomfort thus disappeared forever, and the parents, particularly the mothers, received the wholesome instruction how children should be trained, how human beings should in general be treated, in order to work favorably upon them. My informant comprises all in this; "that the "Krippe" is not only to be considered as the asylum of unprotected children, but, if it is carried out in the right spirit, and under conscientious superintendence, it can attain the next and just as important double aim; to become the earliest school of cultivation for children (*école du premier âge*), and a normal school for parents, especially for mothers (*école normale des mères*), in which they can learn how to treat their children physically and morally." For all these reasons, he demands their general introduction into the systems of public institutions for popular education.

With this, he touches a subject which deserves the most urgent consideration; for just this is the junction, where all the most important interests of the family and state unite. It is a wide-spread complaint, that the mortality of children in the first period of their lives, is frightfully great. It is well known that its cause is to be sought in the mistaken care, or entire want of care of them, often the result of unsettled family life; and thus the cause of the mortality of children, is closely connected with the uncultivated condition of our people.

Here, at the origin of the evil, the first lever of remedy must be applied. This is also the first, most practicable and most direct means. The social question of the present can not be solved, before the pedagogical problem of the care of unprotected childhood is solved. The social problem is ramified, highly complicated, and scarcely to be grasped in its whole extent. It is divided into a series of the most difficult propositions of a political, financial, ethical and pedagogical nature, and no civil wisdom has yet shown itself equal to the task. Its solutions perhaps, belong to a distant future. It is different with this important, partial proposition. The energetic introduction of "Krippen," of protecting institutions for early childhood in general, is not dependent upon preparatory intermediate grades. It can immediately follow, when it has become, as it deserves, the object of the general public care. By the obligations, under which the state and the community are, for the fostering of youthful culture, and by the increasing greatness of the evils which are to be combated, it can be demanded henceforth, from state and community, that every where, where regulated instruction exists, protecting institutions for earliest childhood shall be added. The monied sacrifice, necessary for it, can not be considered, for it would be barbarous and shameless, for parents to wish to escape this duty. The opposition of irrationality or habit, wherever it appears, must be broken down; this belongs to the indisputable "guardian" duties of the state.

The judicious proposals of the medical authorities whom we have mentioned above, show us how every thing is already prepared for the realization of this highly important aim, how the means need only to be organized, in order to make with them an effectual beginning. In regard to this, I quote the the following:—

"The pastor, as the shepherd of his parish, whose physical and spiritual weal are dear to him, will find this subject worthy of his attention, and ecclesiastical and also municipal authorities will realize how closely the same is connected with the physical and moral well-being of the community. There are two classes of vocations, pre-eminently in whose power it lies, to work beneficently, or to breed mischief; the surgeons who are nearest the people, and their first advisers in matters of health, and the midwives who, beside their care of the new-born babe, wield and are called upon to wield a great influence upon its later nurture. Both should well preserve the good which they have learned in their schools, realize it for the general good, and not sink back into the prejudices of the people, or, in order to please them, and win their favor, support them in error. Both these classes should also closely observe the limits where their authority and capacities stop, in order not to do injury by encroaching upon the medicinal province lying beyond their vocation.

"A broad field is here opened for individuals and societies, in the sense of humanity and good works. So much is said about the care for the physical and moral well being of the working people; prizes have been bestowed for it in the Paris exhibition. In addition to other things may the new born children of the workmen be cared for, and the example of a factory owner in Alsace be imitated, who allowed his working women, six weeks after the birth, to cherish and nurse their children and also later, allowed them at certain times of the day, to nurse them without lessening their wages. In England, ladies' societies exist, which make it their business to spread by word and deed ideas of a reasonable nurture of the infants within their circle. Where only two or three in one place unite and take hold rightly of the matter, there, their labor will be salutary. An object of particular attention should be the illegitimate children who are put out to board, and whose lot is the worst, and whose mortality is the greatest. Further, the Krippen, as benevolent institutions belong here, in practical, simple and inexpensive abodes, for the protection and nurture of infants, through the day, while their parents are absent from home at work."

It is clear, that in all these cases the support of mothers, particularly, and of the female sex generally, must be relied upon. But we must not stop half way, leaving it to ladies, unorganized and unprepared (because unacquainted with the true nature of their duties,) of the higher "cultivated ranks," to form a committee which alternately, or occasionally shall oversee the nurture of the children, which, in the main, is trusted to inferior salaried persons. With this, one seldom rises above a very injurious dilettanteism which allows room for secondary interests and thoughts, and the deep earnestness of the work is mistaken, the contin-

uous conscientiousness of its execution neglected. We find it only sufficient for the importance of the subject, that women, deeply moved by the holiness of their vocation, should consecrate themselves to it, with undivided interest, and that they should have passed through a preparatory school for it.

The point of connection for all this already exists,—the "inner mission" has made the nurture of children one of its works. But it has been done only singly, and more as an experiment, than as a perfectly organized execution, also with almost invisible operations, in view of the immense greatness of the need. The state, the community have not met it half way, have not yet supported and enlarged the single attempts; much less, received the whole institution into the organization of popular education whose starting point and foundation it must become.

The time has now arrived for these demands. The work is great, but possible; for in small ways it is already performed, and the preliminary conditions of a greater execution lie every where ready. The zeal and devotion of private individuals is insufficient; they must join larger societies, or call them forth. But above all, the state is called upon, because it alone holds all the threads in its hands, and controls all the factors whose united operations are necessary; viz., the pedagogical and the medical powers of the land, and chiefly, the influence of the state upon the communities. And as the necessary means, so at least, the German Chambers have never refused to allow the state the sum necessary for purposes of popular education; they have often granted even more than was wished or asked for. Where is there a more evident obligation for the state, a more urgent need for the people and the community, than to provide for the protection and first education of childhood, every where, where the care of the family is insufficient.

A law for the introduction of Krippen and Kindergartens in every community of the land, would surely meet with objection in no German Chambers, from no political party; for this is no party affair, but the people's affair, in the noblest and most peculiar sense.

In conclusion, we will mention another aspect of the subject which must be considered here. It has often been felt and also publicly expressed, that woman's social position must be different in the future, more independent for herself, more important for the community. Hence, new vocations have been sought after, so as to provide the unmarried and the needy with a secure and respectable position in life. Inappropriate palliatives have been proposed, to place girls in railroad and telegraph offices, or to employ them in subordinate services in the law department. It is not disputed, that they are capable for these positions; just as little also, should this appropriate occupation be grudged.

INTERNATIONAL EDUCATIONAL CONGRESS

AT BRUSSELS IN AUGUST, 1880.

THE BELGIAN EDUCATIONAL LEAGUE, a national association of the progressive teachers and school men of Belgium, which has held monthly meetings for papers and discussion on the organization, administration, instruction, and discipline of schools of every grade, public, private, and ecclesiastical, in Belgium, has made arrangements to hold a General Assembly of Teachers and Educators in Brussels, from August 22d to the 29th inclusive—under the honorary presidency of the Minister of Public Instruction.

The Executive Committee, appointed by the League, is composed of men of eminent practical ability, of which H. Augustus Couvreur is President, and M. Charles Buis, Secretary-General.

The original call, issued more than a year ago, was signed by many prominent educators from all the states of Europe, and the recent Circular of the General Committee bears the names of some three hundred individuals connected with the Ministry of Public Instruction, the universities, the normal schools, and other institutions and the Public Press in their several countries.

The programme of proceedings issued by the General Committee contains over ninety subjects, on which special papers or discussions are invited, and in the main provided for. These subjects are assigned to six sections, viz.: (1) Primary Instruction, including *Crèches*, Kindergarten, infant schools, etc.; (2) Secondary Instruction; (3) Superior Instruction; (4) Special Schools, professional, technical, agricultural, commercial, normal; (5) Adult Education; (6) School Hygiene. Each section has a secretary, and will hold sectional meetings; and certain topics belonging to each section will be presented in written papers, and for discussion in the general meeting of the whole congress.

The congress is composed of regular and associate members. All may take part in the deliberations who register their names, thereby agreeing to the general regulations. Regular members will pay a fee of twenty francs, and will be entitled to a copy of the printed transactions, and to three ladies' tickets to the meetings of the congress. Certificated male and female teachers, and professors of secondary schools may become regular members by paying a fee of ten francs.

Educational Societies and corporations can send delegates.

Speakers and contributors of papers can use any language they prefer—and if not in French, the substance of the speeches and papers will be translated by officers of the congress.

For circular giving the topics to be discussed and other information, address Commissioner John Eaton, Bureau of Education, Department of the Interior, Washington, who will forward any correspondence of those who wish to become members for the purpose of attendance, or to receive the reports.

HENRY BARNARD,

Member of General Committee.

*Proceedings.**

The delegates, and their associates from different countries, representing every class and grade of instruction from the Kindergarten to the University met in the Hall of the Athénée Royal, the great Secondary School of Brussels, on the morning of August 22, 1880, and were welcomed by the president of the General Committee, and the Minister of Public Instruction, "to the open deliberations of a Congress called to advance the intellectual, material, and moral progress of mankind."

Volumes of Preliminary Reports.

Each member was presented with a royal octavo volume of 962 pages entitled *Rapports Préliminaires*, made up by the Executive Committee out of the Reports which had been forwarded to the Corresponding Secretary, in response to assignments made by them six months in advance, of topics representing the principal phases of the educational problems of the present time, and which could or might be presented for written or oral discussion in the several sections to which the different subjects were distributed. It is a volume of great permanent value to all educators, and if it were the only result of the Congress, would justify the originators in calling such a Congress together. The volume or volumes of the regular proceedings of the Sectional and General Meetings of the Congress have not yet come to hand.

Section 1.—Primary Education.

The Section devoted to Primary Education was organized in two Divisions, A. and B. In Division A, the Educational System of Froebel was largely considered, its originality and value universally admitted, and the position taken that every elementary teacher should give evidence of having mastered its principles and methods. The necessity of a Transition Class between the Kindergarten and the Primary School was shown, as well as some modifications in the classes and instruction of the latter, by which the intuitional teaching of the former, and individual development began under Froebel's system could be continued through the entire course.

† f the *Rapports Préliminaires* in the Section of Primary Instruction devoted to the Froebel System and the Kindergarten we shall publish those by Jules Guillaume, Brussels; M. Fischer, President of the Vienna Froebel Society; M. Sluys, Director of Model School of the Belgium League; Madame de Portugall, Instructress of Infant School in Canton, Geneva, and Miss Caroline Proglar, Directress of the Special Course for Kindergartners in Geneva.

* See American Journal of Education, Vol. xxxi; p. 1-8.

FURTHER DEVELOPMENT OF FRÖBEL'S SYSTEM.

BY A. S. FISCHER.

President of the Kindergarten Society at Vienna.

QUESTIONS PROPOUNDED FOR THE BRUSSELS CONGRESS.

Has the Fröbel system given any ground for well-founded criticisms?

Is there need of a special normal training for Kindergarten teachers?

Is it proper to apply the principles of Fröbel in primary instruction, and by what means can this be done?

No system of education has had as many partisans and adversaries as that of Fröbel. If this fact does not furnish the best demonstration of the practical importance and extraordinary scope of this system, still it deserves a thorough examination on account of the bitter and constantly repeated attacks in the hope of overthrowing it, and of the courageous and persevering efforts of its partisans to confirm and secure it. The bases of this work are already indicated in the question mentioned above; we shall find them in the fact that Fröbel's system needs ulterior developments, but also that it is in the highest degree unsceptible of them.

Whoever has taken the trouble to learn the principles of Fröbel in his works, and to penetrate into the spirit of his system, must have found that we are obliged to recognize in this pedagogue the true psychology of the life of childhood. Long before his day, the importance and necessity of an educating influence in the first period of life had been felt, but no one had discovered the means of conducting and hastening the development of the mind and body in the earliest years. Comenius and Pestalozzi had preferred to pursue the development of the first ideas by the education of the senses, which was to precede all instruction, properly so called. We know very well all that Pestalozzi did to reform teaching in general, by the recognition of intuition as the absolute foundation of every notion. As the "Book for Mothers" points out, he wished to exercise the child from its tenderest years in attentively examining, in distinguishing what is only accidental from what is the very nature of the object; he wished, by determined psychological exercises to fashion the intuition by the art of examining. Yet as man cannot be considered merely as a being seeking to know, but also as a being of sensibility; since we cannot consider him complete except with the two faculties, we must also take into account his need of activity as soon as he enters into relation with his fellow mortals. Pestalozzi considered knowing without aptitude as the most fearful gift which a malevolent genius could bestow upon man. But in spite of all his investigations he did not find the simplest means by whose assistance art can educate the child from the cradle up to the sixth year. It is consequently no small merit in Fröbel to have recog-

nized better and more profoundly than all his predecessors the nature and wants of the child, and to have found at the same time the means of satisfying these wants. If, in spite of the diversity of the plays and occupations imagined by Fröbel, in spite of the ingenious mode of their arrangement for the kindergartens, in which they have been exclusively used until now, the latter are still struggling to make known their utility; the reason of this is to be found less in the system of Fröbel than in the broad development of his fundamental ideas, in the mixture of what is chimerical and merely accessory with the important and truly valuable things, and finally in the practical application of his ideas by his successors.

CRITICISM ON FRÖBEL SYSTEM CONSIDERED.

In the first place Fröbel is indefinite; on one side philosophic reflections serve as a basis for the application of a simple game, that of ball, with which children have been amused from time immemorial without racking their brains about it; on another side they are lost in puerilities, oddities and absurdities. These external appearances have obscured his magnificent pedagogical principles, and have prevented many people from seeking their more profound and diversified uses, and giving them the desired scope. This is especially the case with the plays on which Fröbel discants in a striking manner, although with emphasis in certain passages in his works. He seeks and finds in every play of the child unity and correlations and influence upon its future years. But the child imitates in his way what he sees adults do, and does not wish, as Fröbel thinks, to have a presentiment of his future years in his plays. He lives in the present and the present furnishes the aliment necessary to his need of imitation and representation. To give an aim or a more profound meaning to the play is, to injure its direct and immediate utility and thereby to annihilate all the child's pleasure. When in the movement plays we direct the child's attention to what he is doing; if we lead him to reflect upon the happiness and innocence of childhood; if we force him to sing the beauties of nature, the peace and concord that reign in the village, the play loses all its savor, all the seasoning which give it a charm in his eyes.

A second defect consists in the form of Fröbel's poems. Certainly he is fully in the right in considering poetry an essential means in the education of the child, and in wishing to utilize it as such. Is not childhood itself the age of poetry? And cannot every mother, every educator convince himself of the salutary effect of appropriate poetry upon the child? But let it all be poetry and not insipid prose, however moral. How many rhymed platitudes, void of meaning, we find in the "Mother Songs?" When the defenders of the cause justly think that Fröbel in this part of his poetry only wished to show mothers in what way they were to exercise the minds and limbs of their little darlings, but did not intend to constrain them as to the form, and that he never offered himself as a model, we can but ask them why they have pre-

served this form which they deem insuitable, thus injuring the reputation of their master without use to the cause itself? Is it not nonsense and want of reflection to put into the mouths of older children the songs Fröbel composed for the mothers so that they might sing to their infants? When for instance the baby of the kindergarten sings "Does my child know how to turn his little hand?" It is the same with the ball plays. In the "100 ball songs," most of the songs are beyond the reach of the child, and are to be counted among the most injurious ones because they accustom the children too easily to what is ordinary and destroy the joy that belongs to the true plays. If the mother, however, can use any of these common-place things, with her infant, when every sound from her mouth, every intonation of her voice has a fixed meaning, when each one of her words awakens the child's life, it appears unnatural to let these rhymed allegories and personifications be sung in the kindergartens. Where could we see the demonstration of a natural development when the impressions that the form and color of the ball make upon the child are sung in the following manner: "Let me see it on the right and on the left, let me turn it this way and that, it still looks like a round ball on every side?"

Or thus: "My dress is blue like the sky, mine is green like the meadows in spring," etc. And yet these phrases are pointed out as coming from the personal observation and experience of the child. The ball may and ought to preserve its rights in the kindergartens as at home and in the streets; but let the children play ball as they have been accustomed to do in the company of their little comrades, and let them practice the exercises which their strength permits and not constrain them by systematic motions.

It is the same with the other gifts of Fröbel. Is it natural to initiate the child at two years of age into the notions of time and space, as for example, when the mother sings: "The ball occupies its place, so where it is the cube cannot be?" Or this sentence: "He who desires much very easily loses what little belongs to him."

We acknowledge in general that songs are an important means in education, especially for the heart, we only speak here of their abuse.

In the first place, singing is a magnificent means of teaching children speech. In singing they are constrained to articulate the words; singing therefore is an excellent way in which to correct many a defect which children show on their entrance into the kindergarten in relation to language and the volubility of speech. So singing facilitates the execution of different plays (plays of the ring and marching), in which it is important for those who are playing to observe an equal movement regulated by the exactitude of the measure. But we must not abuse this gift of the Creator. Fröbel does this when he wishes every play and every occupation to be accompanied by songs. There is a little song for every ball play; they sing when building, when arranging the little sticks, before, during and after their work.

Is there any need of proof that this unnatural method is injurious to the development of the child in more than one point of view? We know that in the best kindergartens every thing is not accompanied by singing, but in the different collections of songs published by the partisans of kindergartens, we find little unformed and insignificant songs and we have a right to suppose that they are put there for some other reason than the literary interest they may inspire. Then let us remove these purely didactic songs which are unsuitable for children, and replace them by true children's songs set to national music.

The occupations, partly imagined, partly found by Fröbel in the world of childhood, but which he brought together with the aim of making them serve for a systematic development of all the powers, exercise the internal and external senses of the child (sight, hearing, touch, the senses of form, color, size and number), in order to hasten the exact perception of objects, their signs and their properties, and to put children in a condition to translate immediately all these appreciations by external representation and thus to strengthen their observing faculties. But here, Fröbel has not known how to keep a certain moderation. He wishes to neglect no side susceptible of perfectibility in the child, but he uses many things that are too fatiguing for children of such tender age, too much above their reach, and uses precious time in these mistaken ways. He thus misses the aim of education. There is one very important point of view, too little seen heretofore, which the following considerations will touch upon.

Each occupation must answer to the individual degree of development of the intellectual and physical strength of the child, and we must carefully set aside all those whose execution requires a greater skill or the use of implements with which the child might hurt himself; we must observe the characteristics of each mode of representation, for without severely setting the limits of each of these modes, the sense of form would not be assisted, but falsified. In the discussion of the occupations we must then keep rigorously to the limits indicated by the intelligence of the child. Let the free activity of the child have full scope; every occupation we offer him is as welcome to him as the assistance kindly offered him; but after every demonstration let him have the opportunity to try his own experiment; that will ensure the best success, as every thing does which is acquired by one's self. Finally, as the kindergarten is not exclusively to serve the children of well-to-do families, as it is to be made an institution for the education of the children of the people, it must take into view the practical value and utility of an occupation for future use.

According to these principles, the following occupations are to be used in the kindergartens: building; making forms with little planes and sticks; the use of rings, small shells and stones; folding and weaving of paper; braiding, embroidering, drawing, modeling. In all these occupations certain limits are to be observed in regard to the

separate exercises. Every exercise that consists in tying knots or pricking is to be rejected entirely; paper-cutting and pea-work should be reserved for the oldest pupils just before they leave the kindergarten for the school.

Building gives the child a free career for his activity, which inquires and fashions at the same time. The first two building boxes are sufficient for this, the box containing eight equal cubes, and the one containing eight equal bricks. For older children may be added a few round or quadrangular columns, a few arches and forms for roofs necessary for the representation of buildings, bridges and porticoes. We have special regard for the architectural forms; we prefer them to the constructions sometimes made in representation of such objects as bottles, kegs, etc., whose forms contrast too much with the angular projections of the materials, thus sinning in favor of the lively fancy of the child who finds the most distant analogies between objects; but it is something else to permit the activity of the child in free invention, and intentionally to falsify his judgment.*

The conversations upon the forms of construction should be limited to what is immediately before the operator. Every useless fact should be avoided as well as the songs that accompany every form, and the mathematical considerations for which the children are not yet ripe. The building exercises may be used throughout the whole course of the kindergarten instruction, if due regard is had to the degree of intelligence in the children.

The *laying of planes* will well exercise the senses of form and color. The little planes should be painted for this end, and each form (quadrilaterals and different kinds of triangles) should have two colors. In laying the geometric forms, as well as the artistic ones, care should be had to arrange the colors in a truly æsthetic manner, so that each color should be opposite its complimentary one. This occupation should be given to children already somewhat developed, those for instance who are five years old, to whom can be left the individual invention of the forms.

The *laying of little sticks*, preferably the square sticks, is particularly adapted to develop the sense of form and the faculty of representation. As these little sticks represent only the outlines of forms, their use

* Mr. Fischer does not justify himself for this departure from Fröbel's series of forms. Why not use the fifth and sixth gifts in building, which furnish roofs and columns sufficient for all purposes, while the things he interpolates cannot be coordinated with the rest of Fröbel's building material, all which has its relations to forms used in other occupations? Why destroy the wonderful unity of design which is one of the characteristics of Fröbel's materials? Mr. Fischer goes a little too far in the direction of others who have endeavored to improve upon Fröbel in this country, to suit genuine Fröbellians, while in his previous modifications he has not lost the spirit of the great master, but only vindicated Fröbel's own broadness of view, for Fröbel wished every teacher to use his judgment in the distribution and assignment of the material.—Tr.

is an excellent preparation for drawing. It is well to have these little sticks of different colors. By their aid the children can also get a clear idea of numbers. It is also one of the favorite occupations of the youngest children. Hitherto the most absurd forms have been attempted with these little sticks, such as flower-pots, carrots, ponds for fishes, carriages, etc. The little stiff stick is absolutely out of place in the representation of all curvilinear outlines, even when cracked, which does not destroy its rigidity. The imagination of forms should not be falsified in such a way. The contours so made are unnatural. A child naturally taught, whose judgment has not been falsified by any constraint, would sooner take up some clay in order to represent a flower-pot or a turnip. The representation of letters and figures with these little sticks also is an injury to the æsthetic sense, and anticipates in an inexcusable manner what belongs to the school. It is like "Lina's" learning to read and write when six years old with little sticks, instead of sitting before the reading tablet with a pencil in her hand.

We must avoid also going too far in counting. It is enough for the children in a kindergarten to know how to count as far as ten or twelve; let them go so far, as the clock strikes twelve times, and let them know the elementary combinations of the numbers, as $2+2$ etc. Geometrical notions should be developed only to a very moderate degree.*

The *laying of circles and semi-circles* only allows the formation of æsthetic forms, which always contribute to the development of the æsthetic sense; some common forms can also be represented by the combination of rings and little sticks. To trace contours by the assistance of fragments (fractions) of circles is a very good manual exercise, but not before the children have reached the age of 5 years. The preliminary exercises with 1 to 3 fragments are too tedious for little children; a definite form can only be formed with 4 fragments.

With *little stones and shells*, which children can collect themselves in abundance, many simple and graceful forms can be made. This occupation deserves more attention than it has hitherto received.

Folding, which necessitates a certain skill in the fingers, and great accuracy in laying the papers exactly, had better be put off till the age of 5 years. For a long time this exercise should be confined to the reproduction of known forms, like letter envelopes, fish, salt cellars; the representation of more complicated forms should be very gradually attempted and also a few artistic and geometrical forms.

Weaving and embroidering are well known and favorite occupations in

*For the earliest development of geometrical notions, nothing is better than to draw a circle upon the blackboard, and by degrees divide it, first by a diameter into semi-circles, another time make another diameter perpendicular to the first one, thus showing the four right angles, and subsequently show acute angles of various sizes, and lastly an obtuse angle. Such a circle standing permanently on the corner of the blackboard will frequently be found useful in a kindergarten for reference about angles.—Tr.

kindergartens. In these works the cultivation of the æsthetic sense should never be lost sight of; it has hitherto been too much disregarded. It is falsified by combinations of incongruous colors and by tasteless forms, such as that of the harlequin, for instance.* Here we take occasion to repeat that in the choice of occupations, along with the value of the culture, we must never lose sight of the use which the child can make of them in the future.

We are entirely in accord with these who object to choosing the occupations of the kindergarten solely in reference to their future economical value, but the weaving of straw as well as of paper has an educational as well as pecuniary value, and may be introduced into the people's kindergartens.

Fröbel himself described the merits of *drawing* for the kindergarten in the following words: "Drawing is one of the most important means of development for early childhood, because by the aid of drawing the simplest materials and the smallest effort of physical strength are sufficient to enable one to recognize quickly and easily what a child is capable of doing by himself." True and exact as is this thought, wisely considered as Fröbel's guide to drawing is, the reproach which we have uttered before, condemns its indefinite extension. Fröbel, in imitation of Pestalozzi, introduces the canvas for drawing; first upon a squared slate, later upon a paper canvas; the child learning to trace straight lines from one square (or other given unit) up to five in length; these lines are at first vertical, then horizontal, and afterwards oblique. They are studied in all combinations, in angles, in combined angles, and in closed figures. That is certainly a long and tedious way to reach an end that can be reached in a shorter and more interesting way by drawing forms of common use; then artistic forms, as soon as the children have acquired some skill in drawing straight lines.†

We might also make some important objections, some hygienic remarks against the use of slates in the first drawing exercises; but for largely attended and feebly endowed kindergartens, these objections will have to yield for a long time to economical considerations.

The *modeling work* (towards the end of the 5th year) will only be upon the ball and objects derived from it with slight modifications, such as the cherry, the apple, the nut, etc. Later the cylinder and its applications, the flour-bag, sausages, carrots, etc; it is only toward the end of the attendance at the kindergarten that they should attempt tools or images of organic objects.

The *paper cutting* and *pen-work* we have already spoken of as occupations which can only be given to the older pupils, because in the paper-cutting a good deal of judgment is required in the use of the scissors, and the pen-work demands an already patiently acquired skill,

*Let children be saved as long as possible from contemplating grotesque forms or caricatures.—Tr.

†Miss Moore's modification of Fröbel's drawing-school may be referred to here.—Tr.

which can only be met with in children of quite advanced physical and moral development. But even for such pupils, Fröbel's paper-cutting must be given up. We can only begin by cutting forms that have been drawn beforehand. In the pen-work we must limit ourselves in the kindergarten to certain common forms, and to the cube and its simplest applications.

Although it is not our intention to describe everything in the kindergarten and its incontestable means of development, we will discuss two things; the observation of nature and the cultivation of speech.

In order to observe nature, Fröbel puts the child into the garden of the establishment. There the child not only receives an impression of the beauty and sublimity of nature which leads him to the idea of God the Creator, but he also strengthens himself in the exercise of duty by an attentive examination of plants and animals.

The value Fröbel attaches to the spoken or chanted word is the theme of innumerable passages in his works. He says of story telling: "To tell a story is to the mind of the child like a strengthening bath; it is an exercise for the soul and for the judgment, a school of trial and examination for the appreciation of self and of personal feeling." Fröbel looks upon the story especially as a means of culture for the intellect and the character. The culture of thought and speech is attached to all the plays and occupations. If we cannot approve of the instruction specially called *intuitiv* in the kindergarten, we do not consider superfluous the conversations upon real subjects, whether models or images, in the interest of material and æsthetic education.

If, for example, real objects or models of them are best for giving an exact idea of things, it does not follow that the representation of these objects by pictures has no educational value. We cannot always see things near enough, we cannot always be present at the scenes we wish to represent, and among these last, historical scenes or the situations drawn from a story are particularly invisible. From this it may easily be seen what should be, according to our ideas, the images represented in the kindergartens; scenes from story or history, pictures of natural history or of human activity. Upon one and the same picture should be found only subjects of the same kind, or scenes which are intimately related. Consequently everything should be avoided of a foreign or distant kind, and especially everything that requires a degree of imagination and experience such as children cannot have acquired. Baby stories, little tales and poems are particularly suitable to develop character, speech and the religious sense.

From all that has been said, it results that kindergartens must not be looked upon as schools, but as a preparation for schools. Every school study, every work which bears any resemblance to a trade, everything which might injure the normal development of mind and body, must be excluded. Everything is to be based upon the intellectual and physical education without the child being made to feel any constraint,

without his aspirations being checked by the order that nevertheless is necessary; he is to be led gradually into the habit of serious work, into perseverance with all work that has been begun, and into a taste for useful occupations. For this, the instructor must know accurately how to manage all the material and be able to prepare the children for school. We must listen, we ought to listen attentively to the contradictory opinions of teachers; while some think the pupils from the kindergartens too light and frivolous and dissipated in mind, others complain because the kindergartens infringe too much upon the domain of the school, and thus are robbed of their peculiar charm. These claims are founded and these complaints justified only where the children have the misfortune of passing the age which precedes the school period under the direction of persons who have not understood their mission, or were insufficiently prepared for it.

II. SHOULD KINDERGARTNERS HAVE A NORMAL TRAINING?

This leads us to treat of the second question; have the teachers of kindergartens any need of a special normal training? and to this we reply without hesitation in the affirmative. If kindergartens are expected to supply the place of the paternal home, or to complement its work when the numberless hardships of life, or the want in the mother of an intelligent understanding of her holy mission, or of the knowledge and means necessary for its performance make the home worthless to the child, so much the more is it necessary that those who take the mother's place should not also be lacking in this intelligent understanding. The deepest feeling can never completely supply the want of intelligence, but in many cases the mother, full of true maternal love, will by instinct treat her children judiciously. But let us beware of thinking that feminine sensibility or tact alone can be sufficient for this task, any more than a certain practically acquired dexterity for bringing up and suitably occupying a large flock of strange children. If it is now undoubted that in the career of instruction especially, a special education besides natural gifts, is necessary, these conditions exist in an equal degree for the instructress of a kindergarten, as well as for one who has to do with older children. Our ideas upon the formation of teachers for the kindergartens are chiefly the same as those which have served as a basis for the creation of the normal institutions in Austria. Our government should be credited with the great merit of having regulated by law the foundation of institutions for the education of the children who have not yet reached the school age, and also the formation of those who will be called upon to labor in such institutions.

As natural gifts, we require of every kindergarten teacher a clear understanding of the life of childhood, and a consistent character which shall combine a certain seriousness, patience and amiability. Consequently, care must be taken not to receive very young girls who have

hardly reached adult age and yet require oversight themselves, or persons already aged and soured by sad experiences. It is impossible to fix an age for the candidates for normal training; but the regulation of the Austrian minister of public instruction requires that they shall have reached the age of seventeen years.

They must also have an agreeable exterior, irreproachable morals, a musical ear and correct voice, the same conditions as are required for admission into other normal schools. In a normal course in Fröbel's method, the qualities specially necessary to work successfully in a kindergarten are a clear understanding of the nature of childhood, knowledge demanded for that end and skill and trustworthiness for the accomplishment of the duties of an instructress. The branches of teaching in the normal course in Austria are: 1, the pedagogy and theory of the kindergarten; 2, the exercises practiced in those establishments; 3, instruction in the mother tongue and notions about common things; 4, drawing with a free hand; 5, the work of forms; 6, singing; 7, gymnastics.

This plan, drawn up by ministerial regulation, forms only one year of study and leaves much to be desired. We will make our observations upon it based upon experience.

The education of kindergartners is triple; pedagogic, scientific and musical.

The pedagogic education must be both theoretic and practical.

The first embraces the principal precepts of general pedagogy, based upon anthropologic (physiologic and psychologic) principles, and special ideas besides of the theory of kindergartens. If we wish the kindergartner to pursue the physical and moral development of her pupils with a clear consciousness of what she is doing, she must learn the laws of that development, not in a scientific form, but in a popular form. Moreover, it is desirable that she should know the history of pedagogy from Comenius to the present epoch. She should know that Fröbel's system has proceeded out of the earlier pedagogic systems, and how it has so proceeded; that its creation was only possible by the successive efforts of such men as Comenius, Rousseau, Basedow, Pestalozzi and Fichte. She will then be enabled to seize clearly the principles of Fröbel, to understand the numerous adversaries the system has raised up, and in what the progress realized by those pedagogues consists.

It is hardly necessary to add that together with the knowledge of Fröbel's method, she must also acquire great practical skill to be a good kindergartner. As the plays and occupations of the method rest very much upon mathematics, it is indispensable that a kindergartner should become acquainted with the elements of geometry. By assiduous and well chosen reading, and by numerous exercises in the art of expressing her thoughts *visu voce* or in writing, the kindergartner should acquire a skill in the use of her mother tongue, which will make

her capable of developing and forming the faculty of speaking to her little pupils by means of conversation and story-telling.

She should also have some notion of the natural sciences, particularly of natural history. The exact understanding of Frobel's principles, which recognized the laws of the individual and those of nature as identical, is impossible without the knowledge of these latter laws.

An acquaintance with the principal animals and the most useful indigenous plants would furnish the kindergartner with materials for conversation on subjects and pictures of natural history.

Without this knowledge she can never venture to give such lessons without preparation. How many times, without this knowledge, she may find herself unable to name an insect, a plant, a mineral, found by one or the other of her pupils, during their stay in the garden, or in a walk in the country! The study of the natural sciences will elevate her general education, and in every situation of life be the source of pure and noble joys.

A kindergartner must not neglect her musical education, at least to a certain degree. It is not enough that she has studied the melodies adapted to the movement plays, and that she knows how to sing them perfectly. She should be able to read an easy song at sight, with confidence and sure intonation. If she knows how to play a little upon the piano or violin the study of the kindergarten songs will be much facilitated. She will also gain in reputation and be able to ameliorate her position pecuniarily.

The teaching of drawing in the normal course for kindergartners should not be limited to drawing in the net, but as the Austrian plan of study requires, it should comprise the free-hand drawing of figures, and an understanding of the wants of kindergartens in this respect.

In gymnastics it is of special importance that the future kindergartner should learn to direct the movement plays with precision and to watch the carriage of her pupils when they sit down, rise up, or walk, in order that she may avoid everything that might be injurious to their growth or the normal development of their limbs.

If we consider that besides this theoretic education which represents the minimum of what may be required of a good kindergartner, one recommends a certain practical skill as soon as she takes up her employment, a skill which she can acquire only in the normal course, the necessity will be clearly seen of extending the duration of her normal studies to two years.

KINDERGARTNERS SHOULD PREPARE FOR SCHOOL.

As one of the principal parts of the task of the kindergartens, we have indicated that which consists in the preparation of the children for the school.

But if we wish that the efforts made in the kindergarten shall bear their full fruit, and that the end proposed shall be fully attained, the kindergarten must be included as an organic member of the education.

and instruction protected by the government, and it must be put in relation with the primary schools in which its action will be continued.

This demand is not new; it is based especially upon the fact that the teaching in many cases would acquire a more intuitive form by means of the activity of the kindergartens, and that this activity would receive a new impulse by the adoption of the work of forms.

It is extraordinary that the recognition of this fact has not penetrated everywhere; that in spite of the fact that ever since Comenius, all the educationists of any note, particularly the pietists and philanthropists, Pestalozzi and Fichte, find in practical work an important means of education, even in our times many voices among the instructors and the partisans of Fröbel's method, have been raised against the introduction of works of form in the school. Many pedagogues who had come forward as defenders of Fröbel's method wished to trace a line of separation between the kindergartens and the school, and have thought it their duty to protest against the continuation of the work of the kindergarten in the primary school. We should be carried too far if we should enumerate all the advantages which would result in a very short time both for the primary school and the kindergarten if they could be put into complete relation with each other. We will only say, in a few words, that the development of the faculty of representation, the supreme end of the kindergarten, is only a mode of application and can be only that; that notwithstanding this, the applications acquired lose their effect only too soon, and even lose all traces in the actual state of the relation between the two establishments; that the modern school will never completely fulfill its task as long as it will persevere in its traditional point of view, which is to impart empty knowledge and to fill the heads of the pupils with a fixed quantity of notions which the school alone can not make really valuable.

The new pedagogy demands the harmonious development of the forces of man. There can be no question that if we furnish the true aliment indispensable to this necessity of creating and forming which shows itself in every healthy child, the occupations of Fröbel are the true means of attaining this end, even in schools; as we have already said, they can only be begun in the kindergarten, but they will find their continuation in the school.

We will instance in the first place *the laying of the little sticks*. This exercise can serve in the school as auxiliary in the teaching of drawing, in the study of geometrical forms and in calculation. While in the elementary class of the primary school the child represents the outline of things by the help of the little sticks, he very quickly makes use of the opportunity to fix the representation by drawing, and soon succeeds in it after the drawing exercises in the net, which he has executed in the kindergarten; for the position of the little sticks as a material line facilitates his perception of form. By different and often repeated representations, we may also in the simplest manner in-

inculcate upon the child the notion of vertical, horizontal, of the angle, the quadrilateral, the triangle, etc. In short, the little sticks which have served in the kindergarten for the intuition of numbers, can serve in the lower class of the primary school as the most instructive counting implements, because the pupil has them in his hands.

Folding can be conveniently used as an auxiliary means of teaching mathematics. If we look for a moment at the simple folding leaf, it shows us immediately lines, angles, figures of all kinds, on which depend the intuitions of form and size, from which we can show, according to the intelligence and degree of development of the child, the most simple geometric laws. The frequent folding of the primitive form of the paper and the continual repetitions of the proportions, prepare the children for the higher steps of geometric and mathematical demonstration, in such a manner that the rules and laws will present nothing strange and difficult to their apprehension. The folding rightly used serves as an auxiliary to the teaching of drawing.

The *paper-cutting*, combined with *pasting*, may be divided into geometric cuttings, and the cutting of various forms. This last is subdivided into special cuttings from given outlines, free cutting without preliminary drawing, and fancy cutting, that is, cutting from the child's own fancy, unaided. The cutting of forms is not only a good preparation for drawing for children from seven to eight years of age; it has another real value, for if at that age drawing cannot be carried so far as to the representation of animals, this specialty becomes important and even necessary in cutting. While cutting the forms of plants and animals, flowers and leaves, these are strongly impressed upon the memory of the children.

Geometric cutting is easily distinguished from the cutting of drawings by the difference of character. This character no longer gives outlines of objects, but interrupted surfaces in which the parts of the figures are to have an exact relation to each other and to the whole. It follows that the understanding of geometric forms immediately awakens the sense of harmony and symmetry. The cut forms are then to be pasted upon the colored paper, regard being had to the exact adaptation of colors. In this manner our children will form groups of forms which will still give them pleasure when a long time after they attend school.

Embroidering, which in the kindergarten is an occupation for both boys and girls will continue to be such only for girls in the school for whom alone it can have any practical application; in this sense it constitutes, in the exact perception of colors and their shades, an exercise of taste for the ornamentation of divers articles made by women.

Embroidering has this advantage over cutting, that it occupies itself not only with mere outlines but with the great lines that represent objects. The principal features which designate the parts and members of the organized forms, are more vigorously salient than in the drawing, because they appear one after the other and thus claim special attention, and also because they are detached in relief, and thus are clearer.

The combination of little sticks by peas, little bits of cork or little balls of clay or wax can be made as interesting as instructive in the school. With these materials, the children reproduce mathematical forms and the forms of crystallization which by their transparency are understood more clearly than in any other representation. Here the different axes of the mathematical solids allow themselves to be clearly seen, while in any other way they are invisible. The mathematical solids may be used as patterns for drawing and for modeling in clay. Besides this, many common forms, like houses, churches, etc., sometimes in connection with folding, sometimes with cuttings in imitation of household utensils, or garden tools, constitute a very advantageous preliminary exercise for the acquisition of skill and technical dexterity.

The clay modeling may be considered a preparatory study for the plastic arts, and offers the opportunity to bring out in all its juvenile brilliancy that sense of form which has already been cultivated in different ways in the kindergarten. Most people occupy themselves with the effects which may result from the transposition of forms. For all these an early education of the taste cannot but be advantageous. Certainly by so instructive an occupation, the natural disposition of some future artist may be increased to a shining light, for it is especially by the free reproduction of isolated forms that we can judge whether the child possesses any such native tendency. The representative domain of modeling is a very extensive one; nature, art, industry, the family, everything furnishes subjects for modeling in clay, which may also be perfectly utilized for the reproduction of mathematical forms. Box making is particularly useful in reference to these last solids. In the beginning, the materials consist only of card-board which is easily cut and managed, and which changes by degrees with the help of a very liquid paste. The art may be begun by making little boxes for seeds, etc. Later, larger boxes may be made for keeping caterpillars or for the preservation of their cocoons; then may follow portfolios for collecting and preserving plants. All these should be covered with colored paper, or narrow bands of different colored papers should be pasted on the edges.

As a consequence of all that has been touched upon here, upon the principle of concentration, all the works that have been designated as suitable for the primary school must be put into relation with the other branches of instruction and be introduced as auxiliary to these. In this way that objection will fall to the ground which is so often repeated, namely, that the modern school embraces too many topics for it to be possible to add any new branches, for the instruction properly so called, gains in intuition and practical value what it may lose in time by the introduction of these new branches.

[Mr. Fischer closes with the remark, that the occupations proposed for the school do not necessitate special place and tools, and are adapted to girls as well as boys. He also attaches great value to school-gardens.]

FURTHER DEVELOPMENT AND ADAPTATION OF FRÖBEL'S SYSTEM.

BY E. JULES GUILLIAUME.

QUESTIONS BEFORE INTERNATIONAL CONGRESS.*

What are the developments and adaptations of which Fröbel's system is susceptible?

Is it suitable to apply Fröbel's principles to Primary School Teaching, and by what means can it be done?

The questions thus formulated by the International Congress of Education are of the highest importance. It cannot be concealed that there is not only disparity, but antagonism, between the kindergarten and the school: in the one we see regulated liberty; the teacher meets the curiosity of the child, provokes its questions, urges it to incessant activity and motion, and play: in the other, constraint dominates; silence and perfect quiet are the rule; the child has not the right to make itself heard; the monotony of interminable lessons is scarcely allowed to be broken by even automatic exercises (rise, sit down, clap your hands, etc.). The result is that the wide-awake, curious pupils, — the best pupils who are from the kindergartens, — are homeless in the school where they with difficulty escape the detentions, double tasks and other punishments calculated to make them feel that work is a punishment imposed upon men since the remotest antiquity; the obtuse and sleepy scholars, on the contrary, who need to be excited by stimulants, are generally considered the good pupils, made examples for their wisdom and docility, and crowned with green laurels to the sound of trombones. In all the countries where Fröbel's method has been planted, the children who have been subject to it are marked as the most intelligent, but at the same time the most refractory to the discipline of the school. The antagonism duly verified, it remains to examine how far it is in the nature of things, and to investigate whether Fröbel's method, which is still a blind alley, can become a path of communication to conduct the child to its destination. First we must take account of the thought of its inventor and inquire if he did not perceive that there was a solution of continuity between his creation and that of his forerunners, and if he has not done something to effect a transition between the two stages of elementary instruction.

I. THE IDEA OF THE KINDERGARTEN UNIVERSAL.

The name of Fröbel is inseparably connected with the organization of kindergartens. The education of early childhood is, in general opinion, the special, unique and exclusive work of Fröbel, the mark of his individuality. Until his time it had been thought that this stage

* Congrès International de l'Enseignement, Bruxelles, 1880, *Rapports Préliminaires*; xiv+301+96+94+112+112+216=662. Translated by Mrs. Horace Mann.

of education belonged to the mother who did the best she could, or to the nurses who had learned by milking cows how to educate children! Fröbel, starting from the principle recognized by other pedagogues, who came before him, that the education of man begins at the moment of his birth, had the original idea of subjecting him to a rational method, instead of abandoning him to chance. But after the seventh year he occupies himself no longer with the child; he delivers him bound hand and foot to the school, leaving to the latter the care of replacing the maternal milk by a more substantial nourishment. Such is nearly the idea of those people who take the kindergartens for nursery schools where children are instructed by mere play.

Fröbel's Education of Man.

Is it necessary to say that nothing is more false than this conception? Before he became the creator of kindergartens, Fröbel was and always remained the author of the *Education of Man*, his *Didactica Magna*, unfortunately unfinished, which embraced, like those of Comenius and J. J. Rousseau, the whole period of the growth and development of the human being, from his cradle till after he leaves the university. The first volume, the only one published, leads him till beyond the first childhood. Far from admitting that there are gaps between the periods designated by the names of nursing and child, boy or girl, young man or girl, man and woman, old man and matron, Fröbel proclaims on every page the necessity of the unification of education in order to arrive at the unification of life: "All the operations of the mind," he says in the beginning, "having for their condition as phenomena in the end, a chronological series, a consecutiveness, a succession, it is absolutely necessary and inevitable that if man has neglected, at any epoch, however near or distant, to produce his strength, to raise it to the condition of work, or at least to display it in view of a work or an action, he will one day be sensible of some imperfection growing out of this neglect; he will not be what he might have been if he had faithfully wrought out his vocation by utilizing his forces."

The mother-idea of the book is the organization of a vast scheme of education in which all sorts of knowledge, instead of being scattered and parceled out, are presented to the child serially and co-ordinated, then brought back to a higher principle, unity. Long before Fröbel, his precursor Comenius had already traced out the plan of an institution in which each stage of instruction should form a whole which should be reproduced in each of the following stages; he directly offered to the pupils an encyclopedia of what they had to learn, which was to be developed more and more: "Let all knowledge," he said, "be given first in a broad and coarse sketch, without isolating the different parts. Every language, every art is to be taught first from its own most simple rudiments, then more completely by rules and examples, and at last systematically with the addition of anomalies, etc."

Fröbel proceeds equally by way of stratification. As he never ceases

to repeat, his principles as well as his educational processes apply not only to the kindergartens but to every subsequent stage of the instruction; not only to youth, but to manhood; and it is with reason that one of his disciples* required as a primary and essential condition of the playthings of the child, that they should be and should remain in their detail and in their totality, his elements of education in all the stages of his development, or, in other words, that the pupil should constantly discover new properties in them, according to his age and his faculties.

If this is true, if the materials of the kindergarten are sufficient for the school also, the questions in the programme of the Congress are very nearly answered; for it is no longer the question to seek, by means of mutual concessions, compromises and half-measures, for the means of reconciling two contrary things; and, in fact, it would be of no use to say, for example, that the school will tolerate a part of the liberty which reigns in the kindergarten, if we did not point out at the same time how that could be put in practice without order having to suffer for it; nor to take the love of work as the sole motive power without also having the means of making the work interesting. It is clear that the adaptation of Fröbel's principles cannot be made except with the views and means which he has himself indicated. From the moment that he is no longer looked upon merely as the founder of kindergartens, but as the creator of a system of education of all degrees, the question is only to assure one's self that the expedients proposed by him are as suitable for the school as for the kindergarten; everything is reduced consequently to a simple verification based upon an exact acquaintance with his plays and occupations.

In the *Education of Man*, Fröbel, although still glued to the formulas of Pestalozzi, gives us the general plan of his own conception; afterward, and to the very end of his life, it is to the *Education of Man* that he refers, "although," he says, "for a quarter of a century and more that it has been written and published, it has been rounded out and simplified in different ways in its methodology." It is at this fountain that we must seek for his own exposition of the generation of forms of which the different plays of the kindergarten are only the applications.

II. DEVELOPMENT OF FORCE IN NATURE.

Force appears to be the first principle of all things, and of every manifestation in nature; it is force which effects the separation of objects and thus produces their individuality.

Every individuality, all diversity claims, besides force, a second necessary condition of form, which is substance.

Matter and force constitute an undivided unity; one does not exist without the other; properly speaking, one cannot be conceived without the other.

*A. Köhler, *Kindergarten und Elementar-Klasse*, 1861, no. 4.

The principle of the transformation of matter, even in its least particles, is the originally spherical effort of imminent force, which tends to radiate spontaneously and equally from all parts. When force develops itself freely in all directions, the material manifestation in space, which is the result, is the sphere. It is thus that the spherical form is the first and the last form of nature, that of the cell, and that of the great celestial bodies, that of water and of all liquids, that of air and of all gaseous forms. It appears as the prototype, the unity of all physical forms, diverse and irreconcilable as they may seem. It contains them all, under the relation of their essence, of their conditions and of their law. No point, no line, no surface predominates in it, and yet it contains all the points, lines and surfaces of other bodies.

The action of force in different directions, and the relations of these directions to each other, have for their immediate and necessary consequence, the heterogeneous and the symmetrical division of matter; it is for each particular case the essential principle of every definite form and figure.

Force, starting from a center, and diverging in straight lines, acts necessarily in two opposite directions in the same line. The preponderance of three double directions, which cross at right angles and remain in perfect equilibrium, gives birth to the cube, each of whose eight angles shows the equivalence of a rectangular direction of three double directions which meet in the interior, while the twelve edges (3 times 4) indicate four times each of the same directions, whose six faces present the six extremities at their center.

In this, the most elementary form of crystallization, the unity of the sphere is replaced by isolated surfaces, definite points or angles, distinct lines or edges. The points, in their turn, seek to develop into lines and surfaces, the lines again seek to condense themselves into points, or to extend themselves into surfaces, the surfaces to transform themselves into lines and points; the three double preponderating directions already imagined in the midst of the six cubic faces endeavor to manifest themselves externally by producing themselves as edges. The result is a solid, the regular octohedron, which counts as many surfaces as the cube has angles, as many angles as the cube has sides, and the same number of edges as the cube, but in intermediate directions.

Each of the three double fundamental directions of force produces itself in the cube by three couples of sides or faces; in the octohedron by three couples of angles or points. There must necessarily exist a solid in which the same directions will be represented externally by three couples of edges or lines; the regular tetrahedron presents us, indeed, in its edges, the six extremities of its three double directions.

The spherical action of force manifests itself thus in three bodies terminated by straight lines and plane surfaces:

The cube, whose three couples of faces	{	represent the three couples of equivalent and fundamental directions.
The octohedron, whose three couples of angles		
The tetrahedron, whose three couples of edges		

In each of these three bodies, the axis coincides with one of the three principal directions and is confounded with it. The cube rests in a stable manner on one of its faces; the octohedron is supported upon a summit, the tetrahedron upon an edge, and thereby the two last mentioned bodies tend to fall upon one of their sides. Their equilibrium upon a larger base brings about a displacement of the axis, which then no longer coincides with one of the three principal directions, but cuts them all three at equal angles. In this new position the elements grouped before by twos or by fours, appear to be grouped three to three, (3 and 3 sides, 3 and 3 edges, 3 and 3 summits). The six faces of the cube no longer are seen as squares, but as lozenges. The principal form of this system is the rhombohedron, whose derivatives, in their turn, constitute several definite series determined by a principal form intimately allied to the primitive form.

The two systems represented by the cube and the rhombohedron offer differences of length between the three fundamental directions; or rather the direction which coincides with the axis is alone greater or smaller than the two others, or the principal directions are all three unequal among themselves. Such is the origin of the six crystalline types generally admitted by mineralogists.

All these forms, of which the sphere is the creative unity, present this peculiarity, that their members are multiples of two or multiples of three, to the exclusion of the numbers five and seven, that is to say, of combinations of the numbers two or four with the number three, and the forms which result from them, which are only produced in the condition of disordered or accidental forms.

It is otherwise in the organic world, in which the spherical form becomes predominant; life there is subordinated to matter (vegetables), or matter is subordinated to vital activity (animals). Vegetables still obey the numerical relations of solids; plants are for the most part in limbs of 2 and 2, or 3 and 3; where the number 5 appears, it is in consequence either of a separation, a division of the fundamental directions of the parts limbed by 4 or by 2×2 ($2+2+1$), or by a contraction of the fundamental directions in the plants limbed by 3 and 3.

The number 5, the combination of the numbers 2 and 3, characterizes the force which has risen to life and movement; it is the essential attribute of the hand, the principal limb of man, his principal instrument in the employment of his creative faculties.

This legality of nature, this manifestation of unity in diversity, Fröbel considers not only to be found in forms, he discovers it in sounds, in colors, in language, as well as in forces and substances.

It is upon this vast synthesis that he builds his whole system of education, and he demands that the child shall be accustomed early to contemplate nature as a whole, developing of itself in each point; for without the intuition and cognizance of unity in the action of

nature and of the diversity which is derived from it, there exists no true science.

III. DEVELOPMENT OF FORCE DEMONSTRATED.

The gifts of Fröbel to the child are nothing but the working out of his theory. After having presented him with the ball in his first gift, as the primitive form from whence issue all the others, he offers him the cube in the second gift, the primitive form of crystalline action; the two contrasts are connected by the cylinder, which participates of both.*

Just as the swelling of the soap-bubble, and the fall of a stone in the water, furnish the child with a clear intuition of the production of the sphere and the circle by the symmetrical radiation of force, so the perforation of the cube and the introduction of a little rod through two opposite surfaces, edges and summits, show him from the first the displacement of the axes and their change of direction. Another phenomenon not less important, presents itself, when the cube, resting by turns upon one face, one edge, or one angle, is suspended to a double cord or a thread one of whose extremities passes through one of the eye-lets, and whose two halves are thus twisted together; the whirling of the cube in a different direction from the twisting impresses the child with a rotary motion, which is made more and more rapid by pulling the two ends of the cord so as to remove them from each other; in consequence of the persistence of the impression upon the retina the edges are thus softened and effaced, the angles become pointless and rounded.

*It is not without importance for the history of the development of Fröbel's ideas to remark that originally the second gift comprised only the ball and the cube. The first exposition which Fröbel made of it in the *Sonntagsblatt* of 1828, Nos. 8-12, makes no mention of the cylinder as an intermediate form. Does this mean, as his biographer Hanschmann supposes, that the fundamental law of the connection of contrasts, upon which Fröbel established his whole system of education, is not found formally expressed in any of his writings antecedent to the year 1840? This is far from the fact; from 1826 we see it perfectly formulated in the *Education of Man* in these terms: "It is well to call the attention of the pupils immediately to one great law, which dominates in nature and thought, namely: that between two things or two ideas relatively different there always exists a third which unites the two others in itself, and is found between them with a certain equilibrium." And in his first description of the second gift, in 1838, Fröbel already gives himself to the search for an intermediary between the ball and the cube; he thinks he discovers it in a ball somewhat elastic, which can affect the form of the cube and be easily restored to the form of the ball.

Later, in his "Complete Exposition of the Material of Occupation in the Kindergarten," Fröbel does not keep to a single intermediary between the ball and the cube; he introduces a second, the cone. "As the cylinder," he says, "excludes the intuition of corners and the fixed rotation upon one point, it calls for and commands in its turn, a body intermediary between the three others, that is to say, uniting the properties of the three; corners (points), edges (lines), sides (surfaces), plane as well as curved; it is the revolving cone." In this new conception, the second gift then comprised, beside the cube, the three round bodies, technically speaking. The cone is, indeed, the intermediary between the sphere and the cube for the series of pyramids, as the cylinder with the two parallel faces is the intermediary for the series of prisms.

The child discovers the relation that exists between the prism and the cylinder, the pyramid and the cone, or in a more general manner, between the many-sided and the round bodies.

Fröbel justly considers it very essential thus to give the child, from its earliest age, a norm to which he can attach the other objects which circumstances will present to him in too great a quantity to be all studied and analyzed in detail. When in the midst of typical and fundamental intuitions or representations, he has understood the ball and the cube, he possesses a scale for the appreciation of all other bodies, and what is infinitely more precious in view of his education, he discovers how diversity, plurality and totality result from unity, and how, after having issued from it, they return to it and reduce themselves to it. The symbolism of Fröbel, the most fruitful of his innovations in the theoretical domain of pedagogy, has especially for its object to teach the child early to consider a single thing under a great many points of view, several things under a single relation, and to discover what there is common in different individuals, to discern what is essential from what is accidental, what is permanent from what is variable.

"When the child," says Fröbel, "considers these three bodies under their different aspects, what have you shown him and taught him? The intermediary cylinder furnishes us the answer:

"What is round would unite with what is straight, what is straight with what is round; from this reciprocal effort proceeds the union of the ball and the cube, the cylinder.

"Thus: the points seek to become lines and surfaces, the surfaces to become lines and points; in short, each endeavors to form and produce all the rest, everything which is another.

"From the law, apparently external, of contrasts and their intermediary, we in this way see result the internally organic and living law of transformation, of development."

The second gift thus constituted, forms the pivot of the materials of occupation proposed by Fröbel; the other gifts and plays are only derivatives of this gift with the parallel translation of bodies into surfaces, lines and points, by the aid of tablets, folding, box-making and cutting,—weaving, little sticks, rings, thread, laths, interlacing, drawing,—pricking, etc.

The following gifts present us, indeed, with simple divisions of primitive bodies; Fröbel indicates them in the following manner:

Divisions of the cube,	{ in dice or cubes, 3d, 5th, 7th gifts,*
	{ into bricks, 4th, 6th, 8th gifts.*

*The 7th gift is derived necessarily from the 5th; the cube appears in that to be divided three times each way, either in 4 times 4 times 4 or 64 dice, some of which are divided into equal parts with slanting surfaces $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{6}$, whose arrangement in relation to a common center permits the representation of the principal regular polyhedrons, the octohedron and the dodecahedron, as contained in the interior of the cube and developing themselves from that. This game is very important as showing

- | | | |
|----------------------------|---|---|
| Divisions of the sphere, | { | 1. Parallel to the periphery (or curved surface) either in half balls or in balls one inside the other;
2. Parallel to a great circle; that is in zones;
3. Through three great circles cutting at right angles, or in eight equal spherical triangles. |
| Divisions of the cylinder, | { | 1. Parallel to the cylindrical surface, consequently into cylinders of different sizes;
2. Parallel to the base of the cylinder, or into equal zones;
3. Through the two planes, cutting at right angles;
4. Into circles or rings of No. 1. |
| Divisions of the cone, | { | 1. Parallel to the curved surface; (or small cones);
2. Parallel to the base, in zones;
3. Through the two planes which cut at right angles in the axis;
4. Into conic sections. |

The child thus learns the *abc* of things, which Pestalozzi was seeking all his life, and which it was reserved for Fröbel to discover. He traces the march of nature; the divisions of the cube initiate him into the forms of the mineral kingdom; those of round bodies introduce him fully into the vegetable world. The concentric divisions of the cylinder give him a presentiment and glimpse of the law which presides over the growth of the tree as plainly as the divisions of the cube enabled him to discover the different systems of crystals; from the pith to the epidermis the force develops, following the direction of the axes; every year adds a new zone more or less thick; the roots radiate as they plunge into the earth, the trunk radiates as it rises toward the sky, the branches ramify in their turn. Everywhere the same spherical action of force shows itself.

IV. PRESENT PRACTICE DOES NOT REALIZE THE THEORY.

The practice of the kindergartens is still far from realizing the conception of Fröbel; in general it has kept to the first six gifts and their dependencies. The round bodies of which glimpses are attained by the rotation of the cube attached to a double cord, and in a still more marked manner by the aspect of the cylinder in the condition of an independent body, are immediately abandoned; they are no longer met in the building plays which are limited to some of the divisions how the external form of these bodies is determined by their center. "By the side of the 7th gift is presented the 8th, which bears the same relation to the 7th that the 8th does to the 5th, and that the 4th does to the 3d." (Fröbel, *Complete Exposition of the material of occupation in the kindergarten*.)

and sub-divisions of the cube at rest (3d, 4th, 5th and 6th gifts). All these divisions affect the prismatic form to the exclusion of the pyramidal series, explicitly pointed out by Fröbel in his description of the 7th gift, and probably comprised in his thought for the constitution of the 8th gift. The only elements which result are prisms whose surfaces offer us only the square, the rectangular parallelogram, and the isosceles right angled triangle. But when we pass from the bodies to the surfaces represented by the tablets, the material of the plays in use presents us, besides, with the equilateral triangle, which is evidently one of the faces of the octohedron constructed by means of the 7th gift, and the scalene triangle which has its origin in the diagonal division of the brick of the 4th gift, a new element which Fröbel, according to all appearances, introduced into the 8th gift.

As to the forms terminated by curved lines, they exist in a permanent manner neither in bodies nor in surfaces. They only appear in the play of the rings published by Madame Fröbel as a complement to the little sticks, in Fröbel's school of drawing, and in the cutting. It is necessary then to go as far as the line to meet with forms which, in Fröbel's idea, were to exist equally as bodies and consequently as surfaces.

The elimination of a whole series of bodies and the intrusion of surfaces which are attached to no solid, are not simple questions of more or less; they are actually breaches into the system imagined by Fröbel. The occupations of the kindergarten form in their totality and in their details, a chain which starts from the sphere and returns to it by three different routes; the hexahedron passing through the surfaces, the octohedron passing through the angles, and the rhombododecahedron passing through the edges. Suppress one or the other of these bodies, and the child no longer comprehends the origin of the cube, its relations with the ball, or the relations of the different solids to each other. Suppress the intermediary forms, (the cubo-octohedric and the cubo-dodecahedric) he no longer seizes the relations between the cube and its derivatives. It is then an important matter to fill up all the gaps which still exist in practice. The creation of the polyhedrons whose principal axes are rectangular and equal, their opaque representation, by means of clay or other ductile substances, and their transparent representation by means of the little sticks connected by peas, and comparison of each of them with the cubes and the other bodies terminate the exercises of the first stage. The child has seen diversity proceed out of unity, the invisible from the visible, the exterior from the interior; he knows that the same form may exist under different volumes, the same dimension may be invested with different aspects; the laws of size and form (mathematics) have been revealed to him by the doing, by simple transformations, without any other reflexion, without the least word of explanation. He then may leave the kindergarten; he is on the threshold of the intermediate school.

What edifice is to rise upon these foundations? Have we here, have

we at least, as for the kindergarten, a plan traced by a master hand? or as we often hear it said, has Fröbel left only vague indications upon what is now called primary instruction, and what should more exactly be called the second stage of instruction?*

The *Education of Man* has already answered this question. Fröbel in his pressing haste, set himself particularly to dig the foundation for his work. But it is easy to demonstrate that in order to erect it at least up to the first stage, he bequeathed to us not only the plan, but most of the materials.

V. FRÖBEL'S LAST THOUGHT.

Besides the *Education of Man*, we possess in effect the last will and testament of Fröbel, the letter which he wrote a month before his death to one of his pupils, Emma Bothmann. One might say that at the moment of setting out for that assembly at Gotha where his method was to be consecrated by the acclamations of the German instructors, the "juvenile old man" had a presentiment of his near end and wished to leave to the world his last wishes and instructions. He had organized the kindergartens and could now say, *Exigi monumentum*. The question now was to solder it to the school proper, "the full school." That is what is perfectly done in that letter, dated from Marienthal, May 25, 1852. Fröbel traces in that very exactly the line of demarcation between the first two stages of instruction: "In the kindergarten, the question is only of intuition, of conception, of doing, of the exact designation of a small number of objects by the appropriate word, but not yet by recognition and cognizance so to speak, detached from the object. The object and the cognizance, the intuition and the word are still under many relations, an intimate unity like that of soul and body in man. This stage of education is, then, to be limited in a very rigorous manner, by the kindergartners. It entirely excludes pure abstract cognizance, independent thought, which it is to be the object of the intermediate school to prepare for."

There is nothing arbitrary in this recommendation and programme. Nor do they result from a preconceived system, but on the contrary from a very exact and attentive observation of child-nature, and the physiological laws of the development of the human being. It is between the sixth and seventh year that the preponderance of the brain over the spinal marrow is established for good; before that time the cerebral mass is not only smaller but softer and less deeply furrowed in its convolutions. It is generally towards the end of the seventh year that the child begins to analyze and to elaborate the impressions he has received before, and which hitherto he had confined himself to

*The division established by Fröbel was:

1. Kindergarten.
2. Intermediate class or school.
3. School of instruction and reasoning.
4. School of vocation and life; professional school.

accumulating; his superficial questions take a more reflective character; he now manifests his inclination for more serious occupations, and his desire to learn, to acquire information, except indeed when a premature constraint has extinguished and stifled in him all curiosity; for nature avenges herself at every age for the violence that is done to her. The beginning of the eighth year, the critical epoch of the second dentition, marks, among well constituted children, the aptitude to receive instruction, properly so called, in as definite a manner as the swelling of the breast and other symptoms announce later the approach of puberty. There is a solstitial point of physical and intellectual development that ought to be taken into consideration for fixing the school age, although in reality there no more exists an age for school than a stature for school; the moment of the passage from the kindergarten into the intermediate class or into the lower section of the primary school depends upon the preparation which each child has received, just as the change from one class to another in the school is regulated neither by the age nor the stature of the pupils, but by their degree of maturity.

Difference between Kindergarten and School.

Fröbel thus characterizes the difference between the two stages of elementary teaching: "In the kindergarten the essential thing is *the child*, his nature, his growth, his development, his education. In the school it is the opposite; the essential thing is the object, its nature, the knowledge, intuition and understanding of its properties and its relations, its designation, etc.; the education that results from it is the accessory, the accidental; the principal thing is the comprehension of the object by the thought, the internal representation, the stripping off of the body, the abstraction. The intermediate school thus forms the transition between the real, sensuous intuition and the abstract conception. "The key of the arch of the occupations of the kindergarten is the transformation of material, and therefore the cognizance of the relations between the different solid (crystalline) forms, their derivation and the connection of each of them with the initial unity. The kindergarten occupies itself but little with drawing, because the fingers are still too weak; the place of it is supplied on one side by the little sticks, and on the other by that favorite occupation of little children, which consists in making "rounds" upon the slate, and which may be perfected to the execution of simple leaves and flowers. Add to that the introduction into life, at first by the movement plays, and then by the cultivation of little garden beds, and you will have the kindergarten in all its extent. "You see," he adds, "upon what basis and with what amount of living germs the child passes from the kindergarten into the intermediate school. The preparatory direction fails him at no point; the impulse has been given for all ulterior progress. All that asks only to be developed from the unconscious to the conscious, and it is the task of the preparatory school of which the kindergarten is the first stage.

"What path does the intermediate school follow? It attaches itself very intimately to the acts, to the phenomena and to the intuitions of the kindergarten; but it gives to the observation of each individual a general significance, an intellectual character, and a form of thought; for example: 'This way, that way, goes my ball; up, down, forward, back (intuition of the kindergarten). I can imagine everywhere in space, three lines, three directions, which cut each other at right angles, in a point (conception of the intermediate school). A whole has two halves; two halves make a whole (intuition of the kindergarten). I can divide a whole into two equal parts and join these two halves to make the whole again (intellectual and general conception of the intermediate school).'"

Then again, the child playing with the parallel tablets in the 5th gift has had more than one opportunity to convince himself that if he places them in a square against each of the equal sides of the isosceles triangle, he uses as many tablets as he would need to make a square upon the third side. He has repeated the same experiment with the rectangular scalene triangles; the school will only have to resume these impressions and to generalize them in order to deduce the theorem of Pythagoras.

Exercises in Language.

The designation of the object by the word and by the sign, and notably writing, with reading for a corollary, belong evidently to the same phase of the child's development.* In the *Education of Man* already Fröbel assigned to the exercises of language the study of the word itself, entirely separated from the object it expresses, and treated speech as a substance. He indicated by that the path to follow in instruction, and traced the outlines of his subsequent pamphlet: "How Lina learns to write and read," that is to say, the decomposition of words into syllables, the dismemberment of the syllables and the analysis of the parts that compose them (vowels and consonants), and in the last place their graphic representation by the means of conven-

*In his monograph: "How Lina learns to write and read" (and not to read and write), Fröbel fixes in a precise manner the age which is suited to learning to read; he puts this occupation in the last year of the kindergarten. He supposes that Lina has attained the age of six years, and that having observed the joy of her father at receiving a letter, and his eagerness to answer it, she has conceived the most intense desire to learn to write. But it must not be lost sight of that the little girl had been educated without suspecting it, in a perfectly normal manner, or as Fröbel expresses himself *in an all-sided unity of life*: before thinking of writing a letter she had learned to execute a multitude of things with the most simple playthings, to build beautifully with the cube and its derivatives; to make pretty designs with tablets of different forms and colors; as well as with the little sticks, etc. Lina then was a precocious child, and the age at which she begins to instruct herself cannot be taken for a rule, when the question is of children who have passed months in knitting a garter very badly, and years in making a stocking which a machine does infinitely better in a few minutes. Such children become adults without going out of leading strings. Fröbel attributes, in a great part, the imperfection of our schools and our teaching to our instructing our children without their feeling the want of it, and even after having extinguished that want in them.

tional signs. "When the scholar shall be familiarized with the viable manifestation of every understood word, enunciated or simply formulated in the thought, we will seek a great choice of expressions which she will write, or indeed, if she desires it, she will be allowed to write words or little phrases herself. The correction is made by the pupil under the direction of the instructor. This method of teaching naturally leads to the knowledge of orthography, which is confounded with that of writing; she thus spares the pupil that dry study, so long and difficult when it is presented to her in an isolated form. She already knows how to read, according to the first notion which is attached to that word, and while formerly she only spelled with great effort at the end of a year of study, she now learns to read without fatigue or trouble, after only a few days' application."

Number.

The process used for the word applies equally to number; for the method is a key which opens all doors; number is treated according to its constituent elements, decomposed and recomposed, analyzed into its parts (equal—unequal, binary series and ternary series), and finally represented by the figure, distinct from the number itself. Here again the child arrives without difficulty at numeration and ciphering.

The tracing of the signs representative of speech and number has for its first condition the study of drawing; by means of the stereotyped netted paper, the child is enabled to reproduce all the forms he has had a glimpse of before, by reducing them to combinations of lines the length of from 1 to 5 squares of the net. The instruction does not go beyond that for the moment, because all the subsequent varieties of number are already given or at least indicated by the number 5.*

Form and Dimension.

For want of time and space, Fröbel limits himself to sending his pupil to the *Education of Man* for what touches upon language and number; and for what regards form and dimension, to the exposition and lithographs of the 5th gift and to the forms of knowledge made with different triangles, "which are with the works in wood the most important means of connection and transition between the kindergarten and the school, while passing through the intermediate class." He advises him to develop what the kindergarten has given him, to set out

*The impossibility of finding the exact relation of the diagonal to the side of the square led Fröbel to adopt for the practice of drawing a sort of compromise, analogous to that which the musicians use, in order, by a toleration of the ear, to put their gamut in unison with that of the physicists; the side of the square being 5, he takes the very approximative ratio 7 as the length of the diagonal. By this process, as simple as it is ingenious, the child, after having drawn the square and the isosceles right angled triangle, which serve as types to the binary series of the 8th gift, translates them without the assistance of the compass, into circles and semi-circles. As soon as this expedient has become familiar, he feels no difficulty in constructing the hexagon and the equilateral triangle, principles of the ternary series of the 6th gift, any more than he does the ellipse, a curvilinear translation of the right angled parallelogram, which belong to the same series.

from the cube to decompose it into its isolated parts by rising to general intuitions and to descend thus from the cube to the square tablets and the surfaces, from the edges to the lines and the little sticks. "You may," he said, "pursue the study of numbers, setting out from the knowledge of isolated numbers and their differences, up to the teaching of relations and proportions, from the stage of intuition up to that of intellectual conception." The same material is thus taken up again as a sub-work and treated in a different point of view.*

Material for the Intermediate Class.

Fröbel, however, does not restrict his materials to the gifts for the earliest childhood; he reserves for the second period of childhood a whole collection of new playthings contained in a box with 14 solids which he sent to his pupil as the support of his exposition. The object of this collection is to give the child the intuition of the derivatives of the cube with their intermediate forms, an intuition which the school in its turn will still later fathom and generalise. It plays the same part, in the intermediate class, as the second gift does in the kindergarten. It is also very closely allied to the kindergarten. The ball, the cylinder and the cube under its double aspect (first as a pure, mathematical cube, then as a cube perforated, and adapted, therefore, to different transformations), form the first four of fourteen solids which are arranged in two parallel series; one comprises the forms which go from the cube to the ball, the other those between the ball and the cube; two lateral compartments contain the complementary parts that serve to reconstruct the cube-type; they may be used for new combinations, and thus furnish material for an infinity of plays; Fröbel himself points out as an excellent recreation the recognition of the different bodies by touch, with the eyes closed.

To these four bodies of the kindergarten, succeed first the octohedron, the rhombododecahedron and the tetrahedron, with their intermediates, then the prisms and oblique pyramids. "These fourteen solids," says Fröbel, in closing his letter, "introduce you into the whole kingdom and domain of nature and bodies in their three principal series of development, according to the modifications suffered by the surfaces, edges or angles. The formation of the bodies here closes; but the development is pursued by means of the forms of plants and animals, as well as by the forms of thought."

The determination of the solids by the direction, number, size, union or separation of surfaces, edges and angles, is a constant provocative to the abstract and comparative study of all the relations of extension, and consequently an initiation into the knowledge of space, form, number and dimension.

The intermediate class thus prepares for the study of crystallography and its laws, in the same way that the kindergarten gave the intuition

*The geometrical paper-folding of Köhler often one of the happiest appropriations of the exercises of the kindergarten to the school.

of bodies. The school will have but one step to take to teach its pupils that salt crystallizes into cubes, alum into octohedrons, etc., in order to lead them to mineralogy on one side, and to chemistry on the other.

Observations of Nature in Excursions.

The intuition and conception of form, dimension and number lead anew to the intuition, the conception and the knowledge of the external world. Here, again, Fröbel refers to the *Education of Man*, in which he recommended to the school-masters to take their pupils at least once a week into the country, "not like a flock of sheep nor a company of soldiers, but as children with their father, younger brothers with the elder, making them observe what nature offers them at every season. Do not let the village teacher say in reply to this: 'my pupils are in the country all day; they run about all the time in the open air.' They run about in the open air, it is true, but they do not live in the country; they do not live in nature and with it. They are like the inhabitants of a beautiful situation, where they were born and have grown up, but who have no suspicion of its beauty." Fröbel meets another objection. "Father, instructor, educator," he says, "do not say 'I, myself, know nothing of that;' the question here, is not to communicate acquired knowledge, but to arouse new knowledge. You will make observations, and you will provoke your pupils and yourself to the consciousness of what you shall have observed. To know the energetic legality of nature and its unity, there is no need of conventional denominations of objects of nature or of their properties, but only a pure conception and definite designation of those objects, according to their essence and the essence of language. The knowledge of the name already given to the object and in general use, is of very little importance; nothing is essential but the clear intuition and designation of the properties not only in particular but in general. Give the object of nature its common local name, or if you absolutely know no name for it, give it the one suggested at the moment, or what is infinitely better, make use of some substitute or circumlocution until you discover, no matter where, the name generally adopted, and thus put your knowledge in harmony with the general knowledge.

"This is why, when you lead your pupils into the country, you should not say: 'I have no knowledge of the objects of nature, I do not know their names.' Should you have only the most elementary instruction, the faithful observation of nature will bring you infinitely more elevating and profound knowledge, external or internal, more living knowledge of individuality and diversity, than the ordinary books you would be able to acquire and to comprehend will teach you. Besides, this supposed superior knowledge commonly rests upon remarks which the simplest man is able to make, often upon phenomena which the simplest man, with little or no expense, sees better than the most costly experiments will show him, provided he always takes his eyes with him to see with."

Fröbel attaches the natural sciences to this contemplation of the external world in a circumference more and more extended, and particularly as a germ and point of departure, the science of botany. With botany is connected, in an entirely organic and living way, the knowledge of the surface of the earth, "for certain plants are companions of the water, and grow on the border of the stream or river; others prefer the carpet of the meadows and valleys, or the fresh and balmy air of mountains; others still were brought from distant countries. Therefore plants are excellent guides for the study of geography. Also botany always second the education of the sense of color and form, by the reproduction of leaves and flowers in drawing or painting."

Such are the suggestions left by Fröbel, in view of establishing a bond between the two degrees of primary instruction, between the concrete and the abstract. They are amply sufficient if not to the elaboration of the complete programme of the school proper, at least for the immediate organization of the intermediate class or the lower section of the primary school. By carrying back to unity the intuitions and knowledge which have come to the child by fragments; by restoring the principle of action that animated antiquity, so as to combine knowing and doing in their industry, Fröbel gave a real basis to education. It cannot be denied that there still exists in the realization of his gigantic work more than one gap and more than one want of equilibrium. But he has traced out the plan, surveyed the ground, and collected the materials; it is for the men of initiative and of good will to do the rest.

PUBLIC LIBRARIES IN CONNECTICUT.

INTRODUCTION.

NOAH WEBSTER, in his "*Miscellaneous Remarks on Divisions of Property, Government, Education, Religion, Agriculture, &c., in the United States*," written at Hartford in 1789, after pointing out the wisdom of the founders of Connecticut and Massachusetts in establishing public schools and colleges, and in making the business of teaching respectable, by employing for this purpose only young men of character and education, calls attention to the favorable influences of parish libraries. "They are procured by subscription, but they are numerous, and have made the desire of reading universal. One hundred volumes of books selected from the best writers, read by the principal inhabitants of a town or village, on ethics, history, and divinity will have an amazing influence in spreading knowledge, correcting the morals, and softening the manners of a nation. I am acquainted with parishes where almost every householder has read the works of Addison, Sherlock, Atterbury, Watts, Young, and similar writings, and will converse handsomely on the subjects of which they treat." In visiting every part of the State in 1838 to 1842, we noted the existence of over fifty of these libraries prior to 1800, and could in nearly every instance follow the results of reading created and fostered in the families of their members, by the larger number of college graduates in such parishes, and the many persons who had become influential in the professions and public life from these parishes and towns as compared with others, where such libraries had not been established. Wherever libraries existed it was found that newspapers were more largely taken and read, and a much livelier and more intelligent public spirit prevailed. Men of influence in the political affairs of the Colony and the country were sure to spring up in such communities. The representative men of the time must be looked for in towns where the press makes itself felt through books and newspapers.

These library associations took different names, but their members were generally of the same parish. Durham had a Book Company in 1733; Lyme a Social Library in 1735; Guilford a Parish Library in 1737; and prior to 1800 upwards of fifty were in operation.

In 1803 the first Youths Library was established in Salisbury, by a donation of books from Caleb Bingham of Boston; in 1838, the first School Library; in 1838, the first of the class of institutions known as Young Men's Institute, and in 1839 the first Library of Reference (in the Connecticut Historical Society's Collections founded in 1825), by the benefaction of David Watkins of Hartford in 1837.

*United Library Association—1740.**

MISS LARNED, in her History of Windham County, devotes a chapter to the "United Library Association," and "The Wolf-Hunt," which together give to Pomfret an enviable position in the History of Connecticut. Of the former—the first library association in Eastern Connecticut—we give a condensed account:

Public libraries were then very rare. Books were costly and money scarce. A small library had been collected at Yale College. Library associations were formed in Lyme and Guilford in 1733, but Hartford, New London, Norwich and other leading towns had made, as yet, no provision for supplying the public with reading. In Massachusetts, associations for procuring books were becoming very common, and thence spread into the border towns settled by that Colony. A grand Union Library Association, embracing the citizens of Woodstock,† Pomfret and Killingly, was projected, perhaps by Colonel John Chandler and the Rev. Messrs. Williams and Stiles, all distinguished as the warm friends of learning and literature. A meeting for this object was held September 25, 1739, at the house of Mr. Ebenezer Williams. Very great interest was manifested. Many prominent men from the north part of Windham County were present. Colonel Chandler was there, as fresh, vigorous and eager in promoting intellectual improvement as when fifty years before he taught the Woodstock children how "to write and cypher." The ministers of the respective towns and parishes were present—Williams of Pomfret, Stiles of Woodstock, Fisk of Killingly, Cabot of Thompson, and Avery of Mortlake. Woodstock was further represented by John May, Benjamin Child, and Penuel Bowen; Pomfret by Abiel Cheney, Ebenezer Holbrook, Joseph Dana, Joseph Bowman, Ephraim Hild, and her two physicians; Mortlake by William Williams; Thompson by Heskiah Sabin, and Joseph Cady, the richest man in the parish, together with William Chandler and the much-trying Samuel Morris from the banks of the Quinebaug. The Hon. John Chandler was appointed moderator, Marston Cabot, scribe, and a most elaborate Triplicate Covenant formally adopted. Each individual covenanted, under his own hand and seal, to pay a certain specified sum, "to be used and improved to purchase, procure, or buy a library, or number, or collection of such useful and profitable English books as the said covenanters by their major vote taken and given . . . shall be agreed and concluded upon, and for no other use or purpose whatever— which said Library shall be called and known by the name of The United English Library for the Propagation of Christian and Useful Knowledge, and the covenanters or proprietors thereof shall be called and known by the name of The United Society or Company for Propagating Christian and Useful Knowledge; in the towns of Woodstock, Pomfret, Mortlake, and Killingly and west part of Thompson Parish, as aforesaid."

The original articles of regulation and agreement were then agreed to by the following original members of the "United Society or Company for Propagation of Christian and Useful Knowledge":

* History of Windham County, Connecticut. By Ellen D. Larned. 1874.

† C. J. John Chandler, one of the original proprietors and settlers of Woodstock, was requested, by the town-men in their first town-meeting assembled in 1690, "to teach and instruct children and youth how to write and cypher," in advance of the establishment of a public school. This he did in his own house for several winters. He was town clerk and treasurer, and foremost in all public affairs, military, civil, and ecclesiastical. He died Aug. 12, 1788, in the 79th year of his age. The *Boston Gazette*, in chronicling his decease, says: "He was in the 40th year of his age when he came to this country, in 1690, which office he served with much honor and acceptance. He was a gentleman greatly delighted with conversation; of a most generous and hospitable disposition. He loved to promote everything that was decent and orderly." Two of his sons graduated at Yale College.

gating Christian and Useful Knowledge** in the northeast corner of Connecticut:—

John Chandler, Esq., twenty pounds.
 Abel Stiles, clerk, thirty pounds.
 John May, gentleman, fifteen pounds.
 Benjamin Child, gentleman, ten pounds.
 Penuel Bowen, pelt-maker, twelve pounds.
 Thomas Mather, physician, fifteen pounds.
 Abiel Cheney, blacksmith, ten pounds.
 Ebenezer Holbrook, yeoman, twenty pounds.
 Joseph Bowman, yeoman, twenty pounds.
 Joseph Dana, yeoman, ten pounds.
 Ephraim Hild, yeoman, fifteen pounds.
 Ephraim Avery, clerk, twenty pounds.
 William Williams, yeoman, twenty pounds.
 Ebenezer Williams, clerk, forty pounds.
 John Fisk, clerk, twenty pounds.
 Marston Cabot, clerk, twenty pounds.
 Joseph Cady, Esq., sixteen pounds.
 John Hallowell, physician, sixteen pounds.
 William Chandler, gentleman, fifteen pounds.
 Samuel Morris, Jun., trader, ten pounds.
 Hezekiah Sabin, yeoman, ten pounds.
 Noah Sabin, yeoman, twenty pounds.
 Edward Payson, yeoman, ten pounds.
 Joseph Craft, yeoman, ten pounds.
 Timothy Sabin, yeoman, ten pounds.
 Jacob Dana, yeoman, ten pounds.
 Isaac Dana, yeoman, ten pounds.
 Darius Sessions, twenty pounds.
 Seth Paine, ten pounds.
 Samuel Ferrin, fifteen pounds.
 Nehemiah Sabin, ten pounds.
 Samuel Sumner, ten pounds.
 Benjamin Griffin, twenty pounds.
 John Payson, ten pounds.
 Samuel Dana, ten pounds.

Books to the value of £418 12s. were ordered from London by Rev. Mr. Williams.

Among the books belonging to the library, we noticed, *Jacobs' Law Dictionary*, *Chambers' Dictionary*, *Rapin's History of England*, *Burnet's History of his own Times*, *Calmet's Dictionary of the Bible*, *Bentley's Sermons*, *Locks on Government and Education*, *Quarles' Emblems*, *Prideaux's Connections*, *Watts' Logic*, *Astronomy*, and other publications.

In 1745, it was found necessary, on account of the distance of the members from a common centre, to resolve into two organizations.

After the death of Colonel Chandler, a separation was deemed advisable. At a meeting of the "United Company for Propagating Useful and Christian Knowledge in Pomfret, Woodstock, &c., met at the Rev. Mr. Williams', June 7, 1745":

"Voted, That the society do agree to divide ye books into two parts, viz., one part to Pomfret and Mortlake, and the other to Woodstock and Killingly, according to the interest that the respective proprietors in said towns have therein, and to hold their property according to the abovesaid division, any vote to the contrary notwithstanding."

Thirty-nine volumes were then assigned to Woodstock and Killingly, and the remainder allowed to Pomfret and Mortlake. The residents of the latter

* The name was doubtless suggested by the London Society for the Propagating Christian and Useful Knowledge.

towns at once renewed the covenant, obliging themselves to keep that part together which belonged to the towns in which they lived as a United Library, and to remain under the same regulations and restrictions in general as the former company, with these additional conditions:

"1. That the said Library shall be governed by votes, according to ye interest which the several persons or members have therein.

2. That no member be allowed to dispose of his right out of said towns at all; nor in said towns, but with the consent of the majority of ye proprietors.

3. That each proprietor have liberty to dispose of his right upon his decease, to any one of his heirs living in said towns.

4. That no member be admitted out of said towns.

5. That, inasmuch as the Library is diminished by ye division, the several proprietors shall take out books in proportion to their subscription, or else all shall be obliged to come up to what a twenty pound subscription paid; which addition shall be expended for purchasing more books—and that the Rev. Mr. Williams, Mr. Avery, and Deacon Holbrook be a committee to lay out the money that shall be paid for this end in such books as they shall see fit.

6. That a twenty pound right shall take out two books at a time, though but one of them a folio.

7. That an octavo shall be returned in two months, a quarto in three months, and a folio in four months.

8. That if any book be abused in the hands of any one of said company, he shall be obliged to make it good.

9. That that article in the covenant which speaks of three of ye same tenor being necessary to be kept, be revoked; one being kept by the scribe and recorded, being sufficient.

10. That Eph. Avery be scribe of said company till otherwise ordered; and shall call meetings on occasion agreeable to ye covenant.

11. That the committee before mentioned shall have power to admit new members in the room of any old ones or such as were never members before, as they shall think fit; i. e., within the towns aforesaid; but no new member shall be admitted without paying equal to what a twenty pound subscription paid.

12. That Mr. Samuel Sumner be keeper of said Library till the company shall agree otherwise—and that Mr. Williams accordingly deliver him the books, together with ye case made to keep y^e in."

"The United Society or Company for Propagating Christian and Useful Knowledge in the towns of Pomfret and Mortlake," now numbered twenty-one members. Ebenezer Grosvener, Nathaniel Holmes, Nathaniel Sessions, and Joseph Holland had been previously admitted. Ephraim Hide now resigned his right to Abiel Lyon. The usefulness and popularity of the Library were greatly augmented by its restriction to more convenient limits. New books were from time to time added, less theological and polemic in character, and many residents of Pomfret gladly availed themselves of its privileges. The affairs of the Company were well managed by a faithful and efficient committee, and its membership in time embraced all the leading men of the township. Pomfret's Library became one of her most cherished institutions, and maintained and extended her reputation for intelligence and culture.

Just one hundred years after the establishment of the "United English Library," the editor of this *Journal* visited the towns of Woodstock and Pomfret, and had the satisfaction of handling several of these old volumes, which bore evidence of much, and yet careful, usage. It was still more satisfactory to recall at their ancestral hearth-stones the names of individuals in different States eminent for professional and public service, the germs of whose influence could be traced back to the early schools and libraries of Pomfret and Woodstock—the Chandlers, Dwights, Hydes, McClellans, Putnams, Larneds, Notts, Sumners, &c.

Common School Libraries.

The earliest library connected with a Common School in Connecticut, selected in reference to teachers and pupils, as well as the graduates of the school, was founded by Henry Barnard;^{*} and the first legislation on the subject in this State was suggested in his Report as Secretary of the Commissioners of Common Schools in 1839:

There are but six school libraries in the State. These, with two exceptions, are the contributions of public-spirited friends of schools. The testimony of teachers and committees in favor of their happy influence is uniform in the districts where they have been introduced. Who can estimate the healthful stimulus which would be communicated to the youthful mind of the State—the discoveries which genius would make of its own wondrous powers—the vicious habits reclaimed or guarded against—the light which would be thrown over the various pursuits of society—the blessings and advantages which would be carried to the firesides and the workshops, the business and the bosoms of men, by the establishment of well-selected libraries, adapted not only to the older children in school, but to adults of both sexes, and embracing works on agriculture, manufactures, and the various employments of life.

In an act concerning schools passed by the Legislature in 1839, in pursuance of the suggestions of the above Report, and drawn up by Mr. Barnard, there is the following provisions respecting libraries:

Any school district, in lawful meeting warned for this purpose, is hereby authorized to lay a tax, not exceeding thirty dollars the first year, or ten dollars any subsequent year, on the district for the purpose of establishing and maintaining a Common School Library and apparatus for the use of the children of such district, under such rules and regulations as said district may adopt; and any sum of money thus raised, shall be assessed and collected in the same manner as other district taxes.

In his Report for 1841, Mr. Barnard recurs to the subject, in connection with the District Library System of New York:

"The returns of school visitors show that but few libraries have been established during the past year in the several school districts of the state, and that the whole number in existence does not exceed twenty. These are all the donations of individuals.

"In the state of New York, during the same period, \$106,000 were appropriated, and \$94,998.58 actually expended in the purchase of libraries for every one of her ten thousand school districts. One half of the money was derived from public funds, and the other half was raised by direct tax. The whole number of books in all the district libraries at the close of 1840 was 422,450. At the close of 1843, \$530,000 will have been expended in the purchase of more than two millions of volumes, accessible to every family and every individual.

"Although an injudicious choice of books," says Governor Seward, in his late annual message, "is sometimes made, these libraries generally include history and biography, voyages and travels, works on natural history and the physical sciences, treatises upon agriculture, commerce, manufactures and the arts, and judicious selections from modern literature. Henceforth, no citizen who shall have improved the advantages offered by our common schools, and the District Libraries, will be without some scientific knowledge of the earth, its physical condition and phenomena, the animals that inhabit it, the vegetables that clothe it with verdure, and the minerals under its surface, the physiology, and the intellectual powers of man, the laws of mechanics and their practical uses, those of chemistry and their application to the arts, the principles of moral and political economy, the history of nations, and especially that of our own country, the progress and triumph of the democratic principle in the governments on this continent, and the prospects of its ascendancy throughout the world, the trials and faith, valor and constancy of our ancestors, with the inspiring examples of benevolence, virtue and patriotism exhibited in the lives of the benefactors of mankind. The fruits of this enlightened and beneficent enterprise are chiefly to be gathered

* Mr. Barnard's way of getting up libraries was to offer to give a certain number of books for this purpose to any district that would build a school-house after a plan which he should approve.

by our successors. But the present generation will not be altogether unrewarded. Although many of our citizens may pass the District Library, heedless of the treasure it contains, the unpretending volumes will find their way to the fireplaces, diffusing knowledge, increasing domestic happiness, and promoting public virtue.

"It is impossible," remarks the Superintendent of Common Schools, in his last annual report, "to contemplate the fruits already realized from this part of our system of public instruction, without the highest gratification. The circulation of half a million of valuable books among our fellow citizens, without charge and without price, is a greater benefaction to our race than would be the collection in any one place of ten times the number of volumes. And when we reflect that in five years there will be two millions of such books in free and constant circulation among those who most need them, and who are most unable to procure them, whose minds will thus be diverted from frivolous and injurious occupations, and employed upon the productions of the learned and wise of all ages, we find ourselves unable to measure the mighty influences that will operate upon the moral and intellectual character of our state.

"No philanthropist, no friend of his country and her glorious institutions, can contemplate these results, and the incalculable consequences they must produce upon a population of nearly three millions of souls, without blessing a kind Providence for casting our lot where the cultivation and improvement of the human mind are so eminently the objects of legislative care, or without feeling that every citizen in his station is bound to forward the great work, until we are as intelligent as we are free."

It is impossible to add anything to the force of the above example or remarks, or to soften the humiliating contrast presented in the simple statement of the facts as they exist in the two states. It is to be hoped, however, that Connecticut, with a population much more compact and homogeneous, and with avails of public funds set apart for the education of every child, more than four times as great as is similarly provided in New York, will hold out some inducements for school societies or districts to provide themselves with libraries of well-selected books for the older children and teachers of the school, and for the inhabitants generally. If \$12,000, or twice that amount, of the undivided income of the school fund for the past year could be set apart as 'library money,' to be drawn by school societies or districts, as the public money is now drawn, on condition that a like amount be raised by tax, or individual subscription, and both sums expended by the school visitors in the purchase of suitable books, it would give an impulse to the schools, and diffuse a permanent interest and intelligence through the community, which a much larger sum, expended as at present, can never accomplish.

"Should any appropriation be made, it is worthy of consideration whether it would not be better to have the whole sum expended in the purchase of a society library, and the books placed in as many cases as there are districts, each to pass in succession through them all, instead of buying as many distinct libraries as there are districts. By the latter course there will, almost of necessity, be many books of the same kind in the different districts, the range of selection in each district will be limited, and the interest of novelty be soon lost. By the former, each district will at any one time have access to as many books as under the other plan, and, in the end, to all the books in the several districts; and the interest of the readers will be kept fresh by a constant supply of new authors. By local regulations, the cases could be returned to the librarian of the society every six months for inspection, as well as exchange, and thus the books be more likely to be preserved, and any damage or loss assessed to the proper district." *Barnard's Report for 1841.*

Mr. Barnard recurs to the subject in his Report for 1842: "Some assistance has also been rendered to districts in purchasing and procuring libraries and apparatus. More than three thousand volumes have been added to the former, and more than one hundred articles have been supplied in the last ten years. Some further legislation is necessary to induce every district to supply itself with a library of useful books, and with some indispensable apparatus."

FEMALE EDUCATION IN ENGLAND.

THIRD ARTICLE.

MARY ASTELL AND HER COLLEGE FOR YOUNG LADIES.

MARY ASTELL, an early and able champion of the rights of her sex to a better education than could be got in any considerable number of the homes and schools of England in her day, was born in Newcastle on the Tyne, in 1668, where her father was engaged in trade, and gave her exceptionally good opportunities of study, which she promptly improved. Her uncle, a clergyman of the Church of England, perceiving her aptitude and diligence, taught her philosophy, mathematics, and logic, to which she added the Latin language, and thoughtful reading of the best English authors. Her publications show sound mental discipline, ready wit, and clear, logical reasoning; and she deserves to be held in grateful remembrance for what she did by her pen and life for female education and social advancement.

Rev. A. G. L'Estrange, in his highly interesting *Chronicles of Chelsea*, devotes a chapter to Mary Astell, who resided in Chelsea from 1690 to 1731, when she died, in the sixty-second year of her age.

Mary Astell was herself a learned lady of the older pattern, understanding mathematics, logic, and philosophy, and being familiar with the writings of Plato, Xenophon, Epictetus, Cicero, and Seneca. The decline in female education, during the past hundred and fifty years, had been considerable, and she looked back with regret to the days of Katherine Parr, Elizabeth, and Jane Grey, if not aspiring to the intellectual Elysium of the ancient philosophers. At the same time, she did not advocate the acquisition of a variety of languages, or the perusal of a large number of books, but rather the careful study of a few well-selected treatises, being more anxious to instruct her pupils in the truth according to the best light of the age than in the refutation of the errors of bygone centuries. In thus recommending concentration upon what was practically useful, she rightly indicated the objects of a sound education.

But how was her excellent advice to be carried out amid the distractions of the world, in a frivolous age, when young ladies were surrounded by gay sparks and flatterers, and tempted "to think more of their glasses than of their reflections!" She herself was so frequently interrupted in her studies by the intrusions of gossiping idlers that it was a joke against her that, when she saw certain people approaching her door, she would throw up her window and call out, "Mrs. Astell is not at home." Such was her anxiety that her sisters might escape from "the vanities and impertinencies of the world," and from the contamination of the coarse literature of the times, that she proposed to form a select community, "to make seraphic celibacy popular and honorable among English ladies." With this view, she wrote, in 1694, an essay entitled, "A Serious Proposal to the Ladies for the Advancement of their true and greatest Interest. By a Lover of the Sex." In this, she says that her aim is "to fix beauty and make it lasting, permanent, and secure, and to place it out of the reach of sickness and old age, by transferring it from a corruptible body to an immortal mind." She wishes her pupils to be not

only as lovely, but as wise as angels, and asks them how they can be content to be like mere tulips, "to make a fine show and be good for nothing." They should rise to a high moral and spiritual life, not build upon humor and inclination, which are sandy foundations, nor think that being often on their knees will atone for the shortcomings of their conversation. The college which Mary Astell proposed to found was to be both a place for temporary study and a retreat in which ladies might permanently reside. It was to be a "paradise without serpents." "Here heiresses may be kept secure from the rude attempts of designing men; and she who has more money than discretion need not curse her stars for being exposed a prey to bold and rapacious vultures." Such an education, she observes, "will, perhaps, save many a girl from being married to some idle fellow, and having to support him and a race of beggarly children."

After reading these sentiments, we are prepared to find that another of Mary Astell's works was "Reflections upon Marriage." Not exactly an advocate for what are called "women's rights," she admitted that none of the softer sex could compete with the ablest men in power of mind, any more than in strength of body. But she spoke of her sisters as being oppressed, could not believe that one half of the community were born to be the servants of the other, and says that the duty a woman owes to a man "is only, by the by, just as it may be any man's business to keep hogs; he was not made for this, but if he hires himself out for the employment, he is bound to perform it conscientiously." Although she is fond of calling wives "female slaves," she advocates entire submission to their husbands. Obedience is to be strongly inculcated in her educational system, and is to be carried so far that, although a wife knows her husband to be a fool, she is to regard him as wise and good, and as, in all respects, the best of men. She who cannot arrive at this is not fit for matrimony. And although, under these circumstances, marriage may not be altogether desirable for a woman in this world, it may benefit her in the next; for, where the husband is unkind, the wife will have more opportunities for the exercise of virtue, will find affliction her sincerest friend, and her living martyrdom will be acceptable to God.

Why, she asks, is there such eagerness to enter the married state? What woman is even taught that she should have a higher design than to get a husband—an acquisition thought so very valuable by both sexes "that scarce a man that can keep himself clean and make a bow but thinks himself good enough to pretend to any woman." Men also make their selection injudiciously. "He that does not make friendship the chief inducement in his choice, does not deserve a good wife. To marry for wit or beauty is as bad as for money; the prolific cause of unhappy unions is that men think first of a lady's property; though it is true that many who marry for love alone will repent their rash folly, and become convinced that there was no real kindness in making each other miserable."

Mary Astell tells us that these "reflections" were suggested by the case of the Duchess of Mazarin, who had lived in the same row with her at Chelsea—a lady she considered not to be so much endowed with sense as with wit and beauty. But it has been said that the subject was chiefly brought before her owing to her having been disappointed in an engagement with an eminent Divine.

We are told that "a great lady" very much approved of her scheme for a college, and intended to give ten thousand pounds towards the foundation of such an establishment. Some have supposed that this lady was Queen Anne; but there can be little doubt that the person in question was Lady Elizabeth Hastings, one of Lord Huntingdon's daughters, who was not only a munificent patroness of many charities, but occasionally augmented Mary Astell's narrow income by presents of as much as eighty pounds at a time. The design was not, however, destined to succeed. Miss Astell had spoken of the institution as "a place of religious retirement, and this idea was to be carried out by daily cathedral services

and the observance of the fasts.¹ She was a High Churchwoman, and Bishop Burnet condemned her proposals as savoring of Popery.

A less scrupulous attack was made upon her from another quarter. She had opposed plays, romances, and frivolous works, and said that "a few airy fancies, joined with a great deal of impudence is the right definition of modern wit." Thus she had thrown down the gauntlet, and justly concluded that "the beaux and topping sparks of the town would ridicule her." Her high aspirations became known to Swift, and he could not resist the temptation. He saw that he could raise a good laugh against this promoted old maid, and the "Tatler," with which he was connected, wanted light skirmishing articles, aiming shafts at anything either above or below the ordinary level. So he set to work in true Yahoo style, and, after representing a man as in a sad state of perplexity, owing to his having fallen in love with a Platonee, says that a few years ago a clique of ladies of quality gave out "that virginity was to be their state of life during this mortal condition," and joined to establish a nunnery; but before long a party of rakes gained admission to this sacred retreat, and meeting Madonnella (Mary Astell) made themselves so agreeable to her, that soon the whole company were walking round the garden hand in hand, the final results being just the opposite of those originally contemplated. This lampoon is marked as having been written by Addison; but he was then in Ireland, and there can be no doubt that it was really the work of the more scurrilous man.

In a later number of the "Tatler," Steele treats Mary Astell with more courtesy, as "Mrs. Comma, the great scholar," and in another place represents her as "the forewoman of the jury, a professed Platonist, that had spent much of her time in exhorting the sex to set a just value upon their persons, and make the men know themselves." In the same periodical, Congreve speaks in high commendation of the philosophic Aspasia; and Addison, in the "Spectator," is supposed to allude to Mary Astell as "Leonora." But the latter described the lady's library as one where book-cases alternated with ornamental jars and tea-dishes, and piles of pamphlets were surrounded with china lions, monkeys, and scaramouches. He, however, considers her to be more valuable than those of her sex who only employ themselves in fashionable diversions. These sketches would seem rather to refer to some lady of rank, and we know that many were influenced by Mary Astell's teaching. It was probably through her instrumentality that Lady Catherine Jones, Lady Coventry, Lady Elizabeth Hastings, and others, founded in 1729 a school in Chelsea for the education of poor girls whose fathers were, or had been previously, in the Royal Hospital, and perhaps this early institution may have conducted in some degree to the foundation of the present magnificent Asylum.

Among Mary Astell's works were "An Enquiry after Wit," in which she opposed some of the unorthodox views of her contemporaries, Locke, Lord Shaftesbury, and the Illustrious Society of Kit-Kats." There can be no doubt but that she exercised a refining influence upon her age, and did more good than those who scorned her. She was by no means ambitious of fame, and always wrote anonymously, which led to her "Reflections" being claimed by "an Ingenious Gentleman," and her "Christian Religion as professed by a Daughter of the Church" being attributed to Atterbury. Lord Stanhope writes to the Dean, "You have fathered a mighty ingenious pamphlet on one Mrs. Astell, a female friend and witty companion of your wife."

The following letter from Dr. Atterbury to Dr. Smallridge, an old Westminster schoolmate, gives an interesting description of this lady:

¹ She wrote: "A fair Way with the Dissenters and their Patrons, not writ by Mr. Lindmay or any other furious Jacobite, whether clergyman or layman, but by a very moderate person and dutiful subject to the Queen."

FRIDAY NOON (1706).

"DEAR GEORGE,—I happened about a fortnight ago to dine with Mrs. Astell. She spoke to me of my sermon, and desired me to print it, and, after I had given her the proper answer, hinted to me that she would be glad of perusing it. I complied with her request, and sent her the sermon next day. Yester night she returned it, with a sheet of her remarks, which I cannot forbear communicating to you, because I take them to be of an extraordinary nature, considering they came from the pen of a woman. Indeed, one would not have imagined a woman had written them. There is not an expression that carries the least air of her sex from the beginning to the end of it. She attacks me very home, you see, and artfully enough, and under pretence of taking my part against other divines who are in Hoadly's measures. Had she as much good breeding as good sense, she would be perfect; but she has not the most decent manner of insinuating what she means, but is now and then a little offensive and shocking in her expressions; which I wonder at, because a civil turn of words, even where the matter is not pleasing, is what her sex is always mistress of—she I think is wanting in. But her sensible and natural way of writing makes amends for that defect; if, indeed, anything can make amends for it. I dread to engage her; so I may write a general civil answer to her. I leave the rest to an oral conference. Her way of solving the difficulty about swearing to the Queen is somewhat singular."

The Dean had probably in view some particular passage in Mary Astell's letter when he spoke of her want of courtesy, for her language in her printed works is far more temperate than that of most of her contemporaries. Between her and the Atterburys there seems to have been a constant interchange of hospitalities; but Swift never mentions her during his sojourn at Chelsea. Probably after the attack in the "Tatler" she did not wish to receive him. She was accustomed to mix in the fashionable society of the day, but disliked the levity and conceit she found in it, telling the be-wigged beaux of the period, who quoted St. Paul against her, "that the woman was made for the man," that they would do better to consider that he also said that "if a man wear long hair it is a shame unto him."

Mary Astell was ascetic in her habits, and, we are told, often, for a considerable time, her daily meals consisted of only a crust of bread and water, and a little small beer. Poverty was, perhaps, sometimes the cause of this meagre diet. But she never complained, and was wont to say that "the good should be always cheerful." The greater part of her life, from the age of twenty, was spent at Chelsea, where she lived in Paradise Row; and for several years before her death she walked every Sunday, without regard to the weather, to St. Martin's Church to hear a clergyman, whose preaching she admired. When she perceived that her end was approaching, she ordered her shroud and coffin to be made and brought to her bedside, so as to be always in view, that she might be constantly in a state of preparation. Her disease was cancer, and after undergoing operations for it with exemplary fortitude, she died and was buried at Chelsea in 1731, in the sixty-second year of her age.

Defoe, in his Plan of an Academy for women, in his *Essay upon Projects*, published in 1696, refers, without naming the author, to the "method proposed by the ingenious lady in a little book, called *Advice to the Ladies*, as impracticable, although possessing "a very great esteem for her proposals, and also a high opinion of her wit. Women are extravagantly fond of going to Heaven, but the levity, which is a little peculiar to them, at least, in their youth, will not bear the restraint of a nunnery." "The academy I propose should differ little from a public school, wherein such ladies as were willing to study should have all the advantages of learning suitable to their genius and their quality; and, in particular, music and dancing, and the French and Italian languages."

for you should mend them; or want of time, for nothing is more important to you, or to which your time can be more properly devoted. I think I can know the character of a lady pretty nearly by her handwriting. The dashers are all impudent, however they may conceal it from themselves or others; and the scribblers flatter themselves with a vain hope, that, as their letter cannot be read, it may be mistaken for sense. I am very anxious to come to England, for I have lately been unwell. The greatest happiness which I expect there, is to find that my dear girls have been assiduous in their learning. May God Almighty bless you, my beloved little Sarah, and sweet Mary too.

Extracts from Letters to Lady Cullingwood.

This day, my love, is the anniversary of our marriage; and I wish you many happy returns of it. If ever we have peace, I hope to spend my latter days amid my family, which is the only sort of happiness which I can enjoy. After this life of labor to retire to peace and quietness, is all I look for in the world. Should we decide to change the place of our dwelling, our route would, of course, be to the southward of Morpeth; but, then, I should be forever regretting those beautiful views, which are nowhere to be exceeded, and even the rattling of that old wagon that used to pass our door at six o'clock in a winter's morning, had its charms. The fact is, whenever I think how I am to be happy again, my thoughts carry me back to Morpeth, where, out of the fuss and parade of the world, surrounded by those I loved most and who loved me, I enjoyed as much happiness as my nature is capable of. Many things that I see in the world give me a distaste for its finery.

How do the dear girls go on? I would have them taught geometry, which is, of all sciences in the world, the most entertaining: it expands the mind more to the knowledge of all things in nature, and better teaches to distinguish between truths, and such things as have the appearance of being truths, yet are not, than any other. Their education, and the proper cultivation of the sense which God has given them, are the objects on which my happiness most depends. To inspire them with a love of everything that is honorable and virtuous, though in rags, and with contempt for vanity in embroidery, is the way to make them the darlings of my heart. They should not only read, but it requires a careful selection of books; nor should they ever have access to two at the same time; but, when a subject is begun, it should be finished before anything else is undertaken. How would it enlarge their minds if they could acquire a sufficient knowledge of mathematics and astronomy, to give them an idea of the beauty and wonders of the creation! I am persuaded that the generality of people, and, particularly, fine ladies, only adore God because they are told it is proper, and the fashion to go to church; but I would have my girls gain such knowledge of the works of the creation, that they may have a fixed idea of the nature of that Being who could be the author of such a world. Whenever they have that, nothing on this side the moon will give them much uneasiness of mind. I do not mean that they should be stoles, or want the common feelings for the sufferings that flesh is heir to; but they would then have a source of consolation for the worst that could happen. . . .

Do not let our girls be made fine ladies; but give them a knowledge of the world which they have to live in, that they may take care of themselves when you and I are in heaven. They must do everything for themselves, and never read novels, but history, travels, essays, and Shakspeare's plays, as often as they please. What they call books for young persons are nonsense. The memory should be strengthened by getting by heart such speeches and noble sentiments from Shakspeare or Roman history, as deserve to be imprinted on the mind. Give them my blessing, and charge them to be diligent.

ADMIRAL LORD COLLINGWOOD, ON THE EDUCATION OF HIS DAUGHTERS,
To his Daughter.

OCEAN, AT MALTA, Feb. 5, 1800.

I received your letter, my dearest child; and it made me very happy to find that you and dear Mary were well, and taking pains with your education. The greatest pleasure I have amidst my toils and troubles is, in the expectation which I entertain of finding you improved in knowledge, and that the understanding which it hath pleased God to give you both, has been cultivated with care and assiduity. Your future happiness and respectability in the world depend on the diligence with which you apply to the attainment of knowledge at this period of your life; and I hope that no negligence of your own will be a bar to your progress. When I write to you, my beloved child, so much interested am I that you should be amiable, and worthy of the friendship and esteem of good and wise people, that I cannot forbear to second and enforce the instruction which you receive, by admonition of my own, pointing out to you the great advantages that will result from a temperate conduct and sweetness of manner, to all people, on all occasions. It does not follow that you are to coincide and agree in opinion with every ill-judging person; but, after showing them your reason for dissenting from their opinion, your argument and opposition to it should not be tinged with anything offensive. Never forget for one moment that you are a gentlewoman,—and all your words and all your actions should mark you gentle. I never knew your mother—your dear, your good mother—say a harsh or a hasty thing to any person in my life. Endeavor to imitate her. I am quick and hasty in my temper; my sensibility is touched sometimes with a trifle, and my expression of it sudden as gunpowder; but, my darling, it is a misfortune which, not having been sufficiently restrained in my youth, has caused me much pain. It has, indeed, given me more pain to subdue this natural impetuosity than anything I ever undertook. I believe that you are both mild; but if ever you feel in your little breasts that you inherit a particle of your father's infirmity, restrain it, and quit the subject that has caused it, until your serenity be recovered. So much for mind and manners; next for accomplishments.

No sportsman ever hits a partridge without aiming at it; and skill is acquired by repeated attempts. It is the same thing in every art; unless you aim at perfection, you will never attain it; but frequent attempts will make it easy. Never, therefore, do anything with indifference; whether it be to mend a rent in your garment, or to finish the most delicate piece of art, endeavor to do it as perfectly as it is possible. When you write a letter, give it your greatest care, that it may be as perfect in all its parts as you can make it. Let the subject be sense, expressed in the most plain, intelligible, and elegant manner that you are capable of. If, in a familiar epistle, you should be playful and jocular, guard carefully that your wit be not sharp, so as to give pain to any person; and before you write a sentence, examine it, even the words of which it is composed, that there be nothing vulgar or inelegant in them. Remember, my dear, that your letter is the picture of your brains; and those whose brains are a compound of folly, nonsense, and impertinence, are to blame to exhibit them to the contempt of the world, or the pity of their friends. To write a letter with negligence, without proper stops, with crooked lines, and great, flourishing dashes, is inelegant; it argues either great ignorance of what is proper, or great ignorance towards the person to whom it is addressed, and is, consequently, disrespectful. It makes no amends to add an apology, for having scrawled a sheet of paper, of bad pens,

HANNAH MORE, b. 1745,—d. 1833.

HANNAH MORE, whose name was prominent in English literary history of the last century, and is entitled to respectful recognition in the annals of education both for what she wrote, and for what she did in a neglected portion of the field, was born in Stapleton, near Bristol, in 1745. Her father was teacher in a small Grammar School, and gave his five daughters a substantial education for the period. The eldest, on reaching the age of twenty-one, established a boarding-school for girls in Bristol in 1759, in which she was assisted by her sisters Elizabeth and Sarah, and which Hannah and Martha attended as pupils, until they were old enough to teach. This group of maiden sisters became a notable institution of charity and education for a half century.

Hannah More, although an invalid, was a diligent scholar, and became known as an author of the religious type in 1773, when she published the pastoral drama, *The Search after Happiness*, and in the year following, *The Inflexible Captive*. These dramas attracted the attention of David Garrick and his wife, and through them of Dr. Johnson, Sir Joshua Reynolds, and others eminent in art, literature, and society. Her letters from London until she retired to quiet literary labor and charitable work to Cowslip Green (1785), and afterwards (1789) to Barley Wood, give a pleasing picture of that great literary circle. Miss Kavanagh, in her volume of *Women of Christianity*, thus describes her

Schools for Poor Children.

At some distance from Cowslip Green, and in the immediate vicinity of the Mendip Hills, lies the village of Cheddar, a decayed market town of Somersetshire. It was then in a state of barbarous ignorance; which caused Mrs. Hannah More to observe, that "while we were sending missionaries to propagate the Gospel in India, our own villages were in pagan darkness." In more than pagan darkness—would have been as correct an expression: there is something noble in the free life of the savage; though he may be criminal and barbarous, he cannot, whilst he breathes the pure air of liberty, be quite degraded. But what condition is that of the peasant who, to physical misery unknown in the savage state, unites the vices of civilization with few or none of its virtues! By law, indeed, the spiritual distress of Cheddar and its vicinity was provided for: the vicar of Cheddar resided at Oxford, and received fifty pounds a year for duties which he never fulfilled; the resident rector of Axbridge "was intoxicated about six times a week, and very frequently prevented from preaching by two black eyes, honestly acquired by fighting."

Mrs. Hannah More, and her sister Martha, who was then staying with her, resolved to go amongst those heathens of Christianity, and see what good they could do in a place where they knew not a single individual; where the literary fame of one sister was unheard of, and where the station of both was not likely to possess much influence with the few wealthy and ignorant farmers whose will was the law of the place. It possessed no gentry, and of the two thousand inhabitants by far the greater number were miserably poor. A clergyman rode over from Wells once every Sunday, to preach to a congregation of eight persons; and in the whole